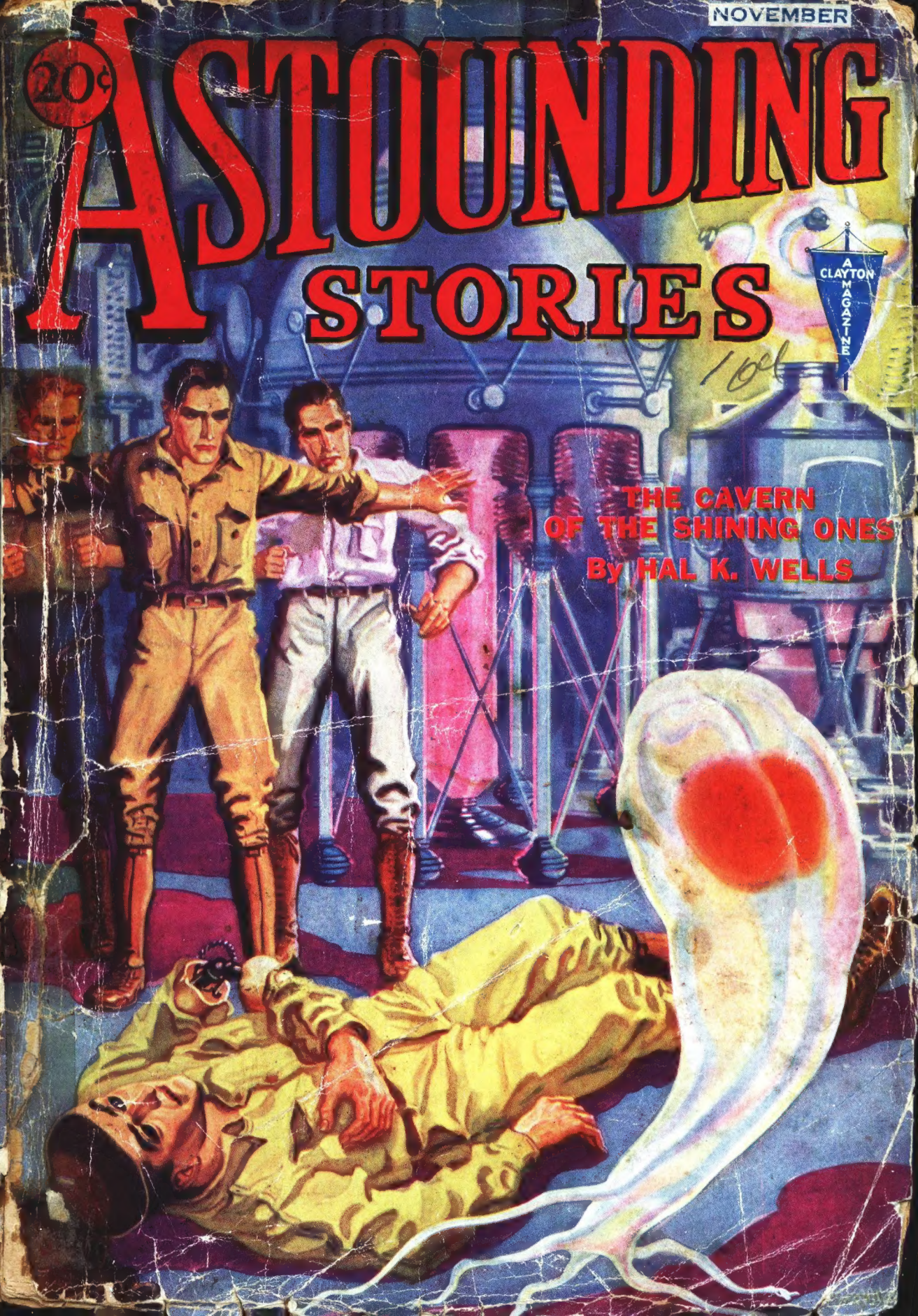
NOVEMBER
20¢
ASTOUNDING
STORIES
A CLAYTON MAGAZINE
10¢
THE CAVERN OF THE SHINING ONES
By HAL K. WELLS

THE INSULT THAT MADE A MAN OUT OF "MAC"

HEY! QUIT KICKING THAT SAND IN OUR FACE!
LISTEN HERE MAC I'D SMASH YOUR FACE ONLY YOU'RE SO SKINNY YOU MIGHT DRY UP AND BLOW AWAY
SEE YOU LATER, GIRLS
THE BIG BULLY! I'LL GET EVEN SOME DAY
OH DON'T LET IT BOTHER YOU LITTLE BOY!
IT WAS NICE TO MEET YOU GRACE CAN I -ER- COME AROUND SOME EVENING?
NO I'M AFRAID NOT...I'M PRETTY BUSY GOOD-BY!
DARN IT! I'M SICK AND TIRED OF BEING A SCARECROW! CHARLES ATLAS SAYS HE CAN GIVE ME A REAL BODY...ALL RIGHT! I'LL GAMBLE A STAMP AND GET HIS FREE BOOK!
BOY! IT DIDN'T TAKE ATLAS LONG TO DO THIS FOR ME! LOOK AT THOSE MUSCLES BULGE OUT NOW!
THERE'S THAT BIG STIFF AGAIN, SHOWING OFF IN FRONT OF GRACE AND THE CROWD. WELL IT'S MY TURN THIS TIME!
WHAM! - NOW IT'S YOUR TURN TO DRY UP AND BLOW AWAY!
OH MAC! - YOU ARE A REAL MAN AFTER ALL!

Mail Coupon Now for my **FREE BOOK**

CHARLES ATLAS Dept. 9-Z
115 East 23rd Street, New York City

I want your proof that your system of ... will make a New Man of me. Send me your free book.

Name .....

Address .....

City ..... State .....

© CHARLES ATLAS

The 97-lb. Weakling Who Became "The World's Most Perfectly Developed Man"

THEY used to think there wasn't much hope for me. I weighed only 97 pounds. I was a miserable weakling. Then I discovered "Dynamic-Tension." It gave me the body that now won the title "The World's Most Perfectly Developed Man." Now I make you this amazing offer. Let me send you a FREE copy of my new book that tells all about "Dynamic-Tension" and what it will do for you. Let me show you why I can make you a NEW MAN in just a few minutes a day. Let me prove in my own way that I can give you the body you want. Will you accept my challenge?

I'LL PROVE You Can Have a Body Like Mine!

Mail coupon today for my famous book. It contains 32 pages packed with photos of myself and pupils. Shows what "Dynamic-Tension" has done for them. Tells how it can do the same for you. Don't delay. Send coupon today!

CHARLES ATLAS

cools . . AFTER SHAVING . . protects

If you want a real treat in face comfort, do this tomorrow morning after you shave: Simply douse full strength Listerine on your face.

Immediately you note a glow of health—a tingling, zippy sensation that wakes up your skin.

Then, as Listerine dries, a wonderful feeling of coolness, as though a moist sea breeze were blowing against your cheeks. Gone that feeling of rawness. Gone that burning sensation.

Moreover, it eliminates the risk of infection. Because full strength Listerine, though safe and healing in action, kills germs in counts ranging up to 200,000,000 in 15 seconds.

Some men are so delighted with the freshening effect of Listerine on the face that they employ it before important engagements at which they must look their best. Try it yourself sometime. Lambert Pharmacal Company, St. Louis, Mo., U. S. A.

We are proud of our new Listerine Shaving Cream that sells for 25¢ the large tube. We want men to find out for themselves what a bargain it really is.

15 SHAVES FREE

Clip this coupon now

Lambert Pharmacal Company, Dept. N. S. 10
St. Louis, Missouri

Gentlemen: Please send me free and postpaid your large sample tube of Listerine Shaving Cream.

Name.....

Address.....

City.....*State*.....

LISTERINE *The Safe Antiseptic*

KILLS GERMS IN FASTEST TIME

Please mention Newsstand Group when answering advertisements

Issued Every 20c

ASTOUNDING STORIES

Other Month

W. H. CLAYTON, Publisher — HARRY BATES, Editor

The Clayton Standard on a Magazine Guarantees:

That the stories therein are clean, interesting, vivid, by leading writers of the day and purchased under conditions approved by the Authors' League of America;
That such magazines are manufactured in Union shops by American workmen;
That each newsdealer and agent is insured a fair profit;
That an intelligent censorship guards their advertising pages.

The other Clayton magazines are

ACE-HIGH MAGAZINE, RANCH ROMANCES, COWBOY STORIES, CLUES, FIVE-NOVELS MONTHLY, RANGELAND LOVE STORY MAGAZINE, WESTERN ADVENTURES, WESTERN LOVE STORIES, STRANGE TALES, COMPLETE WESTERN LOVE NOVELETTES, COMPLETE MYSTERY NOVELETTES, COMPLETE ADVENTURE NOVELETTES, ACE-HIGH NOVELS MONTHLY, THE DETECTIVE LIBRARY, THE READERS' LIBRARY, THE NEW FICTION LIBRARY, and BUNK.

More Than Two Million Copies Required to Supply the Monthly Demand for Clayton Magazines.

VOL. XI, NO. 2 — NOVEMBER, 1932

CONTENTS

COVER DESIGN — H. W. WESSO
Suggested by a Scene in "The Cavern of the Shining Ones."

THE CAVERN OF THE SHINING ONES — HAL K. WELLS — 149
Layrah's Hiring of Husky Down-and-Outers for His Expedition Is Part of a Plan Made Ages Past.

A SCIENTIST RISES — D. W. HALL — 168
"The Face of the Giant Was Indeed That of a God . . ."

WHEN THE SLEEPERS WOKE — ARTHUR LEO ZAGAT — 171
Only Two Small Groups of People—Enemies—Survive the Vast Desolation of the Final War.

TWO THOUSAND MILES BELOW — CHARLES WILLARD DIFFIN — 191
The Voice of the Mountain Heralds Rauwo's Messianic Coming to the White Ones in Their Hour of Need. (Part Three of a Four-Part Novel.)

THE PASSING OF KU SUI — ANTHONY GILMORE — 220
A Screaming Streak in the Night—a Cloud of Billowing Steam—and the Climax of Hawk Carse's Spectacular "Affair of the Brains" Is Over. (A Complete Novelette.)

THE READERS' CORNER — ALL OF US — 279
A Meeting Place for Readers of ASTOUNDING STORIES.

Single Copies, 20 Cents — Yearly Subscription, $1.00

Issued bi-monthly by The Clayton Magazines, Inc., 155 East 44th Street, New York, N. Y. W. M. Clayton, President; Francis P. Pace, Secretary. Entered as second-class matter December 7, 1929, at the Post Office at New York, N. Y., under Act of March 3, 1879. Copyright, 1932, by The Clayton Magazines, Inc. Title registered as a Trade-Mark in the U. S. Patent Office. Member Newsstand Group. For advertising rates address The Newsstand Group, Inc., 155 East 44th Street, New York; or The Wrigley Bldg., Chicago.

Out of a Job?

Send me your name. I'll send new plan by which you can make up to

$15 a day on my "Chain Store System"

IF YOU are out of work or if your salary has been cut, if you are wondering where the money is coming from to pay your bills, then you're just the person I'm looking for.

Go to Work at Once!

I've got a good opening for you right now—a wonderful proposition that offers a chance to start right in making up to $15 a day—full time or spare time—in pleasant, dignified work that will be a revelation to you.

Send me your name at once and by home Mr. TROOP before you. I'll show you how Mr. Reynolds, of New York, made $110 in a single week; W. L. Lemon writes, "After buying my old job, I went out Friday morning and made $20.45 in 7½ hours." Mrs. Ena McCutchen, of Oklahoma, quit a $16-a-week office job and made $26.15 profit the very first day. Mrs. Jewel Harbert, of Ohio, cleared $33 in 7 hours. I have hundreds of letters like this in my office. These big earnings show the wonderful possibilities. And right now, I'm ready to offer you an even better proposition!

30 Customers—15 Dollars a Day

You may wonder at making such big money at this even in the face of hard times. But my amazing new plan of operation, the Home "Chain Store" System, is proving a sensation. Everywhere any wild storm is, because it's just like bringing two "chain stores" right into the home. Saves time, trouble and money. You simply call on regular customers each week or appointment, set up my Local "Chain Store" and my Grocery "Chain Store," write down the orders, handle the money and deliver the goods. You get a big fifty of every dollar we take in as your pay. And with an established Home Chain System, requiring only 30 calls a day, your pay may be as much as $15 a day, regular and steady.

Don't Send Money!

I don't want your money. All I want is a chance to lay the facts before you so you can decide for yourself. If you want a sure, steady chance to make $15 a day—with an old, reliable, million-dollar manufacturing company—then mail the coupon and we have start it at once on my Home "Chain Store" System. You invest no money in stock of goods. Earnings start at once. Don't miss this chance. It doesn't cost a penny to investigate. You can't lose by mailing the coupon, so do it today—right away—before some neighbor gets in ahead of you!

Albert Mills, Employment Mgr.
445 Monmouth Ave. Cincinnati, Ohio

Albert Mills, Employment Mgr.
445 Monmouth Ave., Cincinnati, Ohio.

Without cost or obligation to me, please rush facts about your new "Chain Store" System whereby I can make up to $15 a day starting at once.

Name .....

Address .....

City ..... State .....
(Please Print or Write Plainly)

GREAT SPORT at Low COST!

DOWN comes the cost of the Greatest Sport on Wheels!

The 1933 Harley-Davidsons undersell even the pre-War models. Far and away the biggest values we have ever offered!

Unchanged mechanically from the wonderful models of the past season, both Singles and Twins are lower priced—cut to fit the thinner purses of today!

Handsomer than ever, too — five color combinations optional on the Twins, and a striking new dress on the Singles.

Ask your nearest Dealer about his easy Pay-As-You-Ride Plan. Mail Coupon for new literature.

Ride a HARLEY-DAVIDSON

MAIL THE COUPON

Harley-Davidson Motor Co., Dept. S-55, Milwaukee, Wis.
Interested in your motorcycles. Send literature.

Name .....

Address .....

Please mention NEWSSTAND GROUP when answering advertisements

Crosspatch father ... laughing at breakfast

He cussed at his *razor* . . . and he stormed at the coffee and he kicked the cat off the front porch. No one dared to speak to father before breakfast. But thank goodness at last he found a way to end his indigestion.

Dr. Beeman certainly gave us a godsend in Beeman's Pepsin Gum. A delicious gum with pepsin to tone up the system. We all have our irritable times — just a touch of indigestion will spoil the best disposition. Often a package of Beeman's will help. Chew Beeman's every day. The flavor is *delicious*.

ESPECIALLY MADE TO AID DIGESTION . . .

Chew

BEEMAN'S PEPSIN GUM

The Cavern of the Shining Ones

By Hal K. Wells

IT was shortly after midnight when a persistent nightmare aroused Don Foster from sleep. For a moment he lay drowsily in his blankets there on the sand, with memory of the nightmare still vivid.

It had been a monstrous flying thing like a giant blue-bottle fly that he had been battling in his sleep. Memory of the thing's high-pitched, droning buzz still rang in his ears. Then abruptly he realized that the peculiar buzzing was no

Layroh's hiring of husky down-and-outers for his expedition is part of a plan made ages past.

. . . Yet that thread held.

mere echo of a nightmare. It was an actual sound that still vibrated from somewhere within the camp.

Startled into full awakening. Foster propped himself up on one elbow. The sound was penetrating, but not particularly loud. He was apparently the only one whom it had awakened. In the gray gloom of the desert starlight he saw the blanket-shrouded figures of the rest of the men still deep in slumber.

He realized the source of the sound now. It came from inside the black walls of Layroh's tent, pitched there in its usual isolation on a slight rise fifty yards from the sleeping group. Foster grunted disgustedly to himself. More of Layroh's scientific hocus-pocus! The man seemed to go out of his way to add new phases of mystery to this crazy expedition of his through the barren wastelands of the Mojave.

For a solid week now they had been working their way back and forth over a thirty-mile stretch of desert, while Layroh labored with his intricate instruments searching for something known only to himself. Whatever reason Layroh had for recruiting a party of fifteen to accompany him was still a mystery. So far the men had done practically nothing except trail along after Layroh while he worked with his apparatus.

It was a state of affairs that caused the men little worry. As long as they had enough to eat they were quite content. They were down-and-outers, all of them, human derelicts recruited from the park benches and cheap flop houses of Los Angeles. They had only one thing in common: all of them were large and powerful men.

Don Foster was the youngest of the fifteen, and the only college man in the group. A succession of bad breaks had finally landed him broke and hungry on a park bench, where Layroh found him. Layroh's offer of ten dollars a day and all expenses had seemed a godsend. Foster had promptly jumped at the offer. Layroh's peculiar conditions and rules had seemed trivial details at the time.

FOSTER scowled as he lit a cigarette and stared through the gloom at the violet-lighted tent from which the disturbing sound still came. Seven days of experience with Layroh's peculiarities had begun to make them a little irritating. His sternly enforced code of rules was simple enough. Never approach Layroh unless called. Never touch Layroh's instruments. Never approach Layroh's tent. Never ask questions.

Layroh neither ate with the men nor mingled with them in any way that could possibly be avoided. As soon as they made camp each night he set up his small black tent and remained inside it until camp was broken the next morning. No one knew whether the man ever slept. All night long the violet light glowed inside the black tent. The men had wondered about the unusual color of that light, then had finally decided it was probably something required by the same eye weakness that made Layroh wear heavily smoked goggles both day and night.

Strange sounds in the night as Layroh worked with his apparatus in the black tent were nothing unusual, but to-night was the first time that Foster had ever heard this peculiar whining buzz. As he listened it rose in a sudden thin crescendo that rippled along his spine like a file rasping over naked nerve-ends. For one shuddering second there seemed to be an intangible *living* quality in that metallic drone, as though some nameless creature sang in horrible exultance. Then abruptly the sound ceased.

FOSTER drew a dep breath of relief and ground his cigarette into the sand beside him. Better try to get to sleep again before Layroh started some new disturbance with his infernal apparatus.

He was just settling down into his blankets when a movement in the tent drew his attention back to it. Layroh was apparently changing the position of the violet light, for his tall figure was suddenly silhouetted against the tent wall in sharp relief.

Foster started in surprise as another figure loomed darkly beside that of Layroh. For a moment he thought that the unprecedented had happened and some member of the expedition was inside those jealously guarded tent walls with Layroh. Then he saw that the figure must be a mere trick of the shadows cast by the moving light upon some piece of luggage. It looked like the torso of a man, but the head was a shapeless blob and the arms were nothing more than boneless dangling flaps. A moment later the light moved on and both shadows vanished.

Foster grinned sheepishly over the momentary start the distorted shadow had given him, and determinedly rolled himself in his blankets to sleep. It was after sunrise when he awoke. The rest of the camp was already up, but there was one member of the party missing.

Jeff Peters' empty blankets were still spread there on the sand, but no one had seen the big Negro since the camp turned in the night before. The expedition's daily travels under the blazing sun of the Mojave never had appealed particularly to Jeff, and he had apparently at last made good his repeated threats to desert.

THE men were just getting up from breakfast when Layroh finished packing his tent and apparatus in his sedan, and started down toward the camp. As usual, he halted some five yards away from them, standing there for a moment in stony silence.

Physically, the man was a giant, towering well over six feet in height. On several occasions when the expedition's cars had stalled in deep sand he had strikingly demonstrated the colossal strength in his tall body.

His aquiline features, his red-bronze complexion, and his long black hair, were all suggestive of Incan or Mayan ancestry. No one had ever seen any trace of feeling or emotion upon his impassive features. Foster would have given a good deal for just one glimpse of the eyes hidden behind the dark-colored goggles. In their depths he might be able to find some reason for the tingling surge of nameless dread that Layroh's close approach always inspired.

Layroh noted Jeff Peters' absence at once. "We seem to have our first deserter," he commented evenly. His voice was as richly resonant as the tone of some fine old violin. He hesitated almost imperceptibly between words, like one to whom English was not a native tongue.

"It does not matter," he continued indifferently. "We can spare one man easily enough. To-day we shall continue toward the east. Pack the truck at once. We are ready to start."

Without waiting for an answer, he turned and strode back to the sedan. A curious thought struck Foster as he stared after Layroh's retreating figure. What if the oddly distorted shadow he had seen against the tent wall last night had really been that of a man—had been that of Jeff Peters?

FOR only a moment did Foster mull over the idea. Then he promptly dismissed it as being

absurd. He could imagine no possible reason for Jeff Peters being in Layroh's tent in the middle of the night. The shadow had been only remotely like that of a man, anyway. There had been neither head nor arms to the figure, only shapeless masses totally unlike anything human.

They finished packing the breakfast stuff in the supply truck, and the party started out along the trail with Layroh's sedan leading the way. For nearly two hours they followed their usual routine, working steadily eastward and stopping at regular intervals while Layroh made his methodical tests with his instruments.

Then near the end of the second hour something happened that abruptly sent a thrill of excitement through the entire expedition. Layroh had just set his apparatus up on a small sand dune beside the trail. The mechanism looked somewhat like a portable radio, with two slender parallel rods on top and a number of dials on the main panel.

Layroh swung the rods slowly around the horizon while he carefully tuned the various dials. It was when the rods pointed toward the southeast that there suddenly came the first response he had ever received. From somewhere within the mechanism there came a faint staccato ripple of clear beauty like countless tiny hammers beating upon a crystal gong.

THE sound galvanized Layroh into the nearest aproach to emotion anyone had ever seen him display. The giant moved with the furious speed of a madman as he returned the apparatus to the sedan and swung the car out across the sand toward the southeast. After a mile he stopped and hurriedly set the apparatus up again. This time the crystalline signal came in with a noticeable increase in volume.

From then on the progress of the party became a mad dash that taxed the endurance of everyone except Layroh himself. After the first hour they entered a terrain so rugged that the cars had to be abandoned and they fought their way forward on foot. Layroh was forced to turn the radiolike apparatus over to one of the men, while he himself carried another mechanism that consisted of a heavy silver cylinder with four flexible nozzles emerging from one end.

They held as rigidly as possible to a straight line toward the southeast, scrambling over whatever obstacles intervened. Their only stops were at regular intervals when Layroh checked their course. Each time the crystalline signal came in with greater volume.

Their objective appeared to be a cone-shaped peak several miles ahead that loomed up high above the surrounding rock masses. The oddly-shaped mountain was identified by one of the men who had once been a Mojave desert rat.

"Lodestone Peak," he announced succinctly. "Full of iron, or somethin'. A compass always goes haywire within a radius of ten miles of it."

IT was early afternoon when they finally arrived at a level area at the base of the mountain. For the last two miles Layroh had not stopped long enough to make any tests. Now he set the radiolike apparatus in place some ten yards from the face of a sheer cliff that towered high above them.

The crystalline signal came in a rippling flood. He spun the dials. The sound ceased, and the pointing rods glowed with an aura of amber light at their tips. Swift and startling answer came from deep within the heart of the cliff, a mighty note of sonorous beauty like the violent plucking of a string on some colos-

sal bass viol. So powerful was the timbre of the pulsing sound that the entire side of the mountain seemed to vibrate in harmony with it.

Layroh snapped off the apparatus and the sound ceased. Carefully searching until he found a certain spot on the cliff face, he stepped close to it and unlimbered the nozzles of the silver cylinder. Foster noted that at the place selected by Layroh there was a five-foot-wide stratum of slightly lighter-colored rock extending from the sand to a point high up on the cliff face.

From the metal nozzles of the cylinder there spurted a broad beam of dead black. There was a searing flash of blue-white flame as the black beam struck the cliff face. There followed a brief second during which the rock melted into nothingness in the heart of that area of blue radiance. Then the stabbing beam bored steadily on back into the cliff like the flame of a blow torch melting a way through a block of butter.

Layroh adjusted the nozzles until the black beam was a solid shaft of opacity seven feet in height and nearly five in width. The hole in the cliff became a tunnel from which blue radiance surged outward in a shimmering mist as the black beam steadily bit deeper into the rock.

"FOLLOW me," Layroh ordered the men, "but do not approach too close."

He stepped forward and entered the mouth of the tunnel. Shaken by the spectacular thing occurring before their eyes, yet, driven by curiosity as to what might lie at the end of that swift-forming tunnel, the men came crowding obediently after him. A moment later they were within the passage, stumbling dazedly forward through the billowing fog of bluish radiance. There was an odd, almost electric, tingle of exhilaration in that radiant mist as it surged about their bodies.

Fragments of almost-forgotten scientific lore flitted through Foster's brain as he groped for a clue to the action of the strange ray. Not quite complete disintegration of matter, but something very close to it—probably the transformation of matter into radiant energy, an ingenious harnessing of the same forces that are forever at work in the cosmic crucibles of the universe's myriad suns.

The action of the black ray was amazingly rapid. They were forced to hurry forward at a fast walk to keep their distance behind Layroh. The vertical stratum of lighter-colored rock continued straight back into the heart of the mountain. It apparently served as a guide. The color of the blue flame-mist changed perceptibly whenever Layroh allowed the black ray to stray into the rock at either side of it.

FOR nearly two hundred yards they bored their way steadily into the mountain, their path gradually sloping downward. The walls and floor of the swift-forming tunnel were as smooth and hard as though glazed with a film of diamond.

Then abruptly Layroh shut the black ray projector off as the rock ahead of them ended and they broke through into another larger tunnel, dimly lighted by small globes of violet radiance set at intervals in the glassy ceiling. After thirty yards of travel along this tunnel they found their way barred by a massive door of copper-colored metal.

At Layroh's imperious gesture the men halted a dozen feet back of him in the tunnel while he brought something out of his leather

belt-case. Foster was the only one of the group who was near enough to see that the object was a small tube closely resembling a pocket flashlight.

The only break in the surface of the great door was a six-inch disk over near its right-hand edge. Layroh slid this disk aside. Into the opening that was revealed he sent a series of flashes of colored light from the tube—two red, three green, and two blue. The colors were the combination to the light-activated mechanism of the lock. At the last of the blue flashes there was a whirring of hidden mechanism and the portal swung slowly and ponderously open.

LAYROH beckoned to the men to follow him as he strode swiftly on into a vast room that was flooded with bluish light from scores of the radiant globes. As the men passed through the door it reached the limit of its opening swing and began automatically closing again behind them, but they were too completely engrossed in the scene before them to notice it.

They were in a great cavern whose glass-smooth floor was nearly a hundred yards square, and whose ceiling was so high that it was lost in the shadows above the maze of metal girders and cables that made a webwork some forty feet overhead. There was a feeling of almost incredible age about the place, as though it had been sealed away there in the heart of the mountain for countless centuries.

On every hand there was evidence that the cavern and all its contents were the products of a race of beings whose science was one that was utterly strange to that of the modern world. At the end of the room where they stood were row after row of different machines, great engines with bodies of dull silver metal and with stiltlike legs and jointed arms that made them look like giant metal insects. Foster could understand few of the details of the machines, but he felt that in efficiency and versatility they were far ahead of Earth's best modern efforts.

Grouped together in the center of the cavern were many assemblies of apparatus linked together by small cables that descended from main cables in the girder-criss-crossed ceiling overhead. There was a soft hissing of sparks leaping between terminals and a steady glow from oddly shaped tubes which indicated that the mechanisms were still functioning in silent and efficient performance of their unknown tasks.

THE piece of apparatus nearest the door was an upright skeleton framework of slender pillars housing in their center a cluster of coils set around a large drum'ike diaphragm. Foster wondered if this were not the signal device with which Layroh had tuned in his own portable instrument. The principal piece of mechanism in the central space, however—a great crystal-walled case filled with an intricate array of rods and wires—was something at whose purpose Foster could not even guess.

Layroh strode on past the central apparatus toward the back wall. The men followed him. Then as they rounded the apparatus and saw for the first time the incredible things lining that rear wall, tier upon tier, they stopped short in utter stupefaction. Before them was Life, but Life so hideously and abysmally alien that their brains reeled in horror.

Great shining slugs slumbered there by the hundreds in their box-like crystal cells, their gelatinous bodies glowing with pale and ever-changing opalescence. The things were roughly pear-shaped, with the

large end upward. Deep within this globular portion glowed a large nucleus spot of red. From the tapering lower part of each slug's body there sprouted scores of long slender tendrils like the gelatinous fringe of a jelly-fish.

The things measured nearly four feet in height. Each was suspended upright in an individual glass-walled cell, its body supported by a loop of wire that dropped from larger cables running between each row of cells. There was steady and exhaustless power of some kind coursing through those cables. Where they branched at the end of each cell-row there was a small unit of glowing tubes and silver terminals whose tips glowed with faint auras of leaping sparks.

THE slugs were dormant now but the regular changes in the opalescent sheen which coursed over their bodies like the slow breathing of a sleeping animal, gave mute evidence that life was still in those grotesque forms, waiting only to be awakened.

Fascinated by the tiers of glowing things, one of the men started slowly forward with a hand outstretched as though to touch one of the cells. His advance aroused Layroh to swift action. The bronze-faced giant whirled and swung the nozzles of the black ray projector into line with the man.

"Back, *yaharigan*, back!" he ordered imperiously. "The Shining Ones have slumbered, undisturbed for a thousand centuries. They shall not awake from their long sleep to find the filthy fingers of a *yaharigan* defiling their crystal cells. Back!"

Panic-stricken at the threat of the black ray, the man stumbled backward to join his fellows. Layroh's startling statement of the incredible age of the shining things in the cases erased all thought of the expedition's code of rules from Foster's mind.

"You mean that those—those *things*—moved and lived in the outside world a hundred thousand years ago?" he asked dazedly. "But there is no indication of there ever having been any such creatures among Earth's early forms of life."

"FOOL!" There was angry disdain in Layroh's resonant voice. "They who slumber here are a race born far from this planet. They are the Shining Ones of Rikor. Rikor is a tiny planet circling a wandering sun whose orbit is an ellipse so vast that only once in a hundred thousand years does it approach your solar system. Rikor's sun was nearly dead and the Shining Ones had to find a new home soon or else perish. Then their planet swung near the Earth, and their scouts returned with the news that Earth was ideally suited for their purpose. There were barely five hundred of the Shining Ones all told, and they migrated to Earth in a body."

"And they've been in this cavern ever since, sealed up like tadpoles in fish bowls?" The question came from Garrigan, a strapping sandy-haired Irishman whose first blind panic at the black ray's menace was swiftly giving way to curiosity.

"It was your ancestors who drove the Shining Ones into their retreat here," Layroh answered grimly. "When the Shining Ones arrived upon Earth they found the planet already in the possession of a race of human beings whose science was so far advanced that it compared favorably even with the science of Rikor. This race was comparatively few in numbers, and was concentrated upon a small island-continent known as Atlantis. Shining Ones and Atlanteans met in a war of titans, with a planet as the stake. The Shining Ones were vanquished in

that first battle. They lost a fifth of their number, and barely half a dozen of their smallest space ships escaped destruction.

"PLANNING a new and decisive assault, the Shining Ones planted atomic mines throughout the foundations of Atlantis. But the Atlanteans struck first by a matter of hours. At a set moment every volcanic vent on the Earth's surface belched forth colossal volumes of a green gas. Though that gas was harmless to creatures of Earth, it meant slow but certain death to all Rikorians. Furiously the Shining Ones struck their own blow, setting off the cataclysmic explosion that sank Atlantis forever beneath the waters of the Atlantic. Scarcely a handful of Atlanteans escaped, but Rikor's victory was a hollow one. Earth's air was so thoroughly poisoned that it would require centuries of slow ionization by sunlight to again make it fit for Rikorian breathing. The Shining Ones had at most three months before the slow poison would weaken their bodies to the danger point."

"Why didn't they go back to their own planet, then, where they belonged?" broke in the truculent voice of Garrigan again.

"That was impossible," Layroh answered impatiently. "The few space ships they had left would carry barely a score, and Rikor's sun was already so far advanced in its swing away from Earth that there would be time for only one trip. There was only one chance for survival remaining to them. They knew of a process of suspended animation in which their bodies could survive almost indefinitely without being harmed by the Atlantean gas. They would require outside aid to be awakened from that dormant state, so a small group of them must remain active and embark for Rikor, to try to survive there until Rikor returned near enough to the Earth for them to again cross the void.

"THE dormant ones must have a retreat so well hidden that they would not be disturbed during the thousand centuries that must elapse before they could be awakened. The Shining Ones sped back to their base on the North American continent and in the three months remaining to them they prepared this cavern here in the heart of the mountain. Radium bulbs supplied its light. For the unfailing source of electrical energy needed to course through the dormant bodies and keep them alive they tapped the magnetic field of the planet itself, the force produced as the Earth rotates in the sun's electrical field like an armature spinning within the coils of a dynamo."

It was Foster who broke in with the question that was in the thoughts of the entire party. "Just where do you come in on all this?" he asked bluntly. "And what was your reason for bringing us here?"

There was blazing contempt in Layroh's rich voice as he turned toward Foster. "*Yaharigan* of Earth!" he jeered. "Your brain is as stupid as the feeble brains of those true *yaharigans* of Rikor whose physical structure your human bodies so closely resemble. Have you not guessed yet that I am no contemptible creature of Earth—that this human shell I wear is nothing but a cleverly contrived disguise? Look, *yaharigans*, look upon the real face of the one who has come to restore the Earth to its rightful masters!"

With a single swift movement, Layroh snatched the colored goggles from his face and flung them aside. There was a smothered gasp of horror from the group. They saw now why Layroh had always

worn those concealing lenses. There were no eyes in that bronzed face, nothing but two empty sockets. And from deep within the skull there glowed through those gaping sockets a seething pool of lurid red —the nucleus spot of a Shining One!

REELING backward with the rest of the men from the horror of the glowing thing within the skull, Foster dazedly heard Layroh's resonant voice ring exultantly on: "My ancestors were among the twenty Shining Ones who remained active. After placing their comrades in their long sleep those twenty survivors set up signal apparatus in the cavern so that it could be found again no matter how much the outside terrain might change. Then they filled in the entrance tunnel with synthetic rock and embarked for Rikor.

"There upon that dying planet generations passed. When the time came that Rikor's sun again neared Earth, so rigorous had life become upon Rikor that only six Rikorians remained alive. In order to increase our chances of winning through on the perilous trip to Earth, each of us traveled in a separate space ship. The precaution was well taken. We encountered a dense cloud of meteors near Alpha Centauri and I was the only survivor."

Layroh gestured briefly toward the rows of many-armed metal engines. "There are the normal vehicles for a Shining One's body—armored machines powered by subatomic motors and with appendages equipped for every task of peace or war. This synthetic human figure which I now wear was donned only in order that I might have no difficulty in mingling with Earthmen while I sought the cavern. It is an exact replica of the body of an Atlantean, including artificial vocal chords. Even the colored goggles necessary to hide the glowing red of my nucleus are similar to those worn by Atlantean scientists while working with their ray machines—"

LAYROH was abruptly interrupted by a scream of maniacal fury from Olsen, a shambling Swede who stood near the edge of the group. Ever since Layroh's unmasking the Swede had been staring at him with eyes rigidly wide in terror like those of a bird confronting a snake. The steady contemplation of the horror of the blazing red thing behind Layroh's empty eye-sockets had apparently at last driven the Swede completely insane. He snatched a revolver from his belt as he leaped forward, and fired once. His shot struck Layroh in the forehead.

The bullet ripped through the surface of Layroh's face, then glanced harmlessly aside as it struck metal underneath. Layroh never even staggered from the impact. The black ray from the projector caught Olsen before he could fire again. There was a searing flash of flame, then a swiftly melting cloud of blue-white radiance, and the Swede was gone.

Layroh swung the projector back to menace the others. "I had forgotten that *yaharigans* of Earth have weapons that might be annoying," he said evenly. "Two more of you have pistols—Garrigan and Ransome. Toss them away from you at once. Hesitate—and the black ray speaks again."

Sullenly the two men obeyed his order.

"Good," commended Layroh. "In the pits where you are going you will have little use for pistols. When I again take you from those pits you will quickly learn why I brought you with me. *Yaharigans*, I have called you, and *yaharigans* you shall be—Earthly counterparts of

those miserable beasts of Rikor who have for ages been bred only for the one purpose of supplying food for the Shining Ones. I knew that when I found the cavern the process of awakening the Shining Ones would require that they be carefully fed with the calcium and lime from the bones of living *yahurigans*, the normal food of all Rikorians.

"THE few *yahurigans* I had brought from Rikor were consumed on my long trip to Earth. So I had to recruit a party of human beings to go with me and serve as the necessary food for the Shining Ones. My search for the cavern took longer than I had expected for I knew only its approximate location. My own body at last had to have sustenance. Last night the Negro, Jeff Peters, provided that sustenance.

"I shall feed those of you who remain to the first group of Shining Ones to be awakened. After that we shall be strong enough in numbers to sally forth and capture ample food for awakening the rest of our comrades. Then in our full strength we shall emerge and again become masters of a planet upon which your crude race shall exist only as *yahurigan* herds for our sustenance."

Layroh's resonant voice ceased. Keeping the black ray projector alertly covering the men, he strode over to a closed metal door in the wall just beyond them. He took a small tube from a rack beside it and opened the door by sending a flash of yellow light into the mechanism of its lock.

"Into the pits until I am ready for you," he commanded curtly. "They were first constructed for keeping our own *yahurigans* while we were working in the cavern, and they should serve just as well for you."

WITH the memory of Olsen's tragic fate still fresh in their minds, the men obediently filed into the next room, with Layroh bringing up the rear. The room was little more than a single large cell carved from the living rock, and lighted by a single radium bulb in the ceiling.

Its smooth glasslike floor was broken at intervals of ten feet by circular pits fifteen feet deep. At Layroh's order the men entered the floor-pits, one man to each pit. As Foster lowered himself into one of them he saw how grimly efficient a trap the pit was.

An unusually tall and active man might be able to jump high enough to touch the edge, but the effort would be useless. Those glass-smooth edges were so cunningly rounded that they offered no possible purchase for clutching fingers. The diameter of the pit, ten feet, was too great to permit any effort at climbing by wedging one's body between two opposing walls.

Layroh sent every man into the pits but one.

"You will return to the cavern with me, Carter," he ordered. "I have need for you at once."

They heard the door clang shut as Layroh and Carter left the pit room. Chaos reigned as the men flung their bodies against the pit walls in efforts to escape. There was the click of metal as several of them tried with pocket knives to chip finger-holes in the walls, but the glassy surfaces were of diamond hardness.

FOSTER'S brain was numb with despair as he began to realize the true meaning of those sleeping things out in the cavern. Death in some unknown and horrible form was imminent for himself and his companions, he knew, but his thoughts were going far beyond that, to the time when the Shining

Ones would emerge in all their resistless power to ravage and conquer a helpless world.

There could be little doubt as to the futility of Earth's best efforts against the advanced science of these invaders from far-off Rikor. Encased in their colossal machine-bodies of glittering metal, and armed with such terrible weapons as the black ray projector, the Shining Ones would be as invulnerable as men trampling an ant-hill underfoot.

The future status of mankind upon the Earth would be that of vast herds of human *yaharigans*, probably bred for ever greater bone content as men breed cattle for superior food values. The picture aroused Foster to a fury of cold desperation. If they could only escape from the pits there might be a chance to trap Layroh and slay him before he brought those hordes of opalescent slugs to life. Then escape from the cavern itself would be an easy matter. Even if the outer door had been locked since they passed through it Layroh had the light-key and Foster remembered the combination.

Half a dozen wild schemes flitted through Foster's brain, only to be discarded as futile. Then suddenly he thought of something that had every chance of success if only they were given time enough. Layroh in his arrogance had forgotten that his prisoners were not naked brutes of Rikor. In the very clothing the men wore was the means of escape from the pits.

FOSTER'S voice cut through the babel in the room until he gained everyone's attention.

"Our only chance for escape is to get a rope between two pits," he said curtly. "Then one man can climb out while the other holds the rope. We'll have to make that rope from our clothing. No one man can get a strip strong enough, so we'll have to work the strips to a central man who can braid them into a single heavy rope. I'm near the center. Get the strips to me. Tear your clothing into ribbons, and knot them together. Use your knives, watches, anything to weight one end of the strip. Then cast until you get contact with the pit next to you. That way all the strips can be worked to me."

A period of feverish activity followed while the men went to work. Layroh also was busy. Through several narrow ventilating slits high in the cavern wall they heard the hum of machinery.

The first of the men finished knotting their ropes together. With weighted ends muffled to deaden their fall upon the rock floor, they began casting to get contact with their neighbors.

Success came slowly. There were often scores of blind casts made before a weighted end came into an adjoining pit. But the time finally came when Foster had a twenty-five-foot length of rope strong enough to bear his weight. He already had a single strand making contact with Garrigan in the next pit. Garrigan drew the heavier rope in to him, then acted as an anchor while Foster climbed to the floor above.

HIS downstretched hand pulled Garrigan to freedom. Getting the other men up to the floor was the work of but a few moments. They were a weird-looking crew in the torn fragments of clothing that remained to them. Foster stationed them beside the locked cavern door so that they would be hidden behind it when it opened.

"Wait till Layroh is safely inside," he ordered, "then rush him. Get that black ray thing out of commission first. Without that, we should be more than a match for

him. In the meantime you come with me, Garrigan. Maybe we can get a look into the cavern."

By climbing on Garrigan's broad shoulders Foster found that he had a clear view through one of the narrow ventilating slits. Layroh had made efficient use of the time since he had left the pit room. Suspended from softly glowing wires in the large central glass case was a circular group of ten of the Shining Ones.

Foster's eyes widened in horror as he saw the object in which the trailing tendrils of the luminous slugs were sunk. It was the naked body of Carter. As those sucking tendrils drew out the substance of his skeleton, Carter's body was changing slowly, horribly, sinking into a flabby mass of guttylike flesh.

The dormant bodies of the great slugs glowed perceptibly brighter as they fed, and the pulsations of opalescence quickened. The Shining Ones were beginning to awaken. Faint but unmistakable there came to Foster's ears a low singing drone from the group.

He shuddered. He knew now why Jeff Peters' shadow had seemed so grotesquely *boneless*. That droning buzzing sound he had heard from the black tent had been the feeding cry of a Shining One—of Layroh. Then, his horrible feast ended, Layroh had blasted what remained of his victim into nothingness with the black ray.

FOSTER was abruptly startled into action as Layroh turned from watching the central case. Picking up the black ray projector, he started toward the pit-room door. Foster scrambled down. With Garrigan he joined the tensely waiting group beside the door.

There was the sound of the mechanism unlocking. The door opened and Layroh came striding in. In a concerted rush the men were upon him. Foster's hurtling dive for the black ray projector knocked the apparatus out of Layroh's hands. It crashed to the floor with a violence that left it shattered and useless. Swept off his feet by the savage fury of the unexpected attack, Layroh went to the floor beneath the writhing group of men.

The metal sinews of his magnificent body brought him to his knees in one mighty effort, but the numbers of his assailants were too great. Again he was beaten down while powerful hands tore at his limbs. The metal of the ingenious machine that was Layroh's body began twisting and giving way before the savagery of the assault.

He staggered to his feet, flinging the men aside in one last mad surge of power, and lurched toward the cavern. His effort to slam the door closed behind him was blocked by the swift leap of two of the men. Layroh staggered on into the cavern. Then suddenly the torn framework of his legs collapsed completely, and he fell heavily on his back.

The men surged forward with a shout of triumph. But before they could reach Layroh's prostrate figure one of his hands reached up and opened his skull as one opens the hinged halves of a box. From ~~within~~ the skull there rolled a great shining slug, a sinisterly beautiful figure of glowing opalescence, with a scarlet nucleus! For one breath-taken instant it rose to its full height of four feet, hesitated, as if warily regarding the horror-struck men, then with tendrils pressed into its body until it was nearly spherical, the slug that had been Layroh rolled like a ball of living fire across the cavern toward the cluster of machines. Foster snatched up one of the discarded pistols from the floor and fired twice at that hurtling globe of flame, but both shots missed.

A moment later the slug reached the machines. It fled swiftly past a group of smaller mechanisms and selected a gleaming metal colossus whose size and formidable armament indicated that it was designed primarily as an instrument of war. With whipping tendrils the slug swarmed up one of the metal legs and into a small crystal-walled compartment in the forward end of the machine.

There was the crackling hiss of unleashed sub-atomic forces somewhere within the metal body. The machine moved in fumbling uncertainty for a moment as the slug fought to get control of mechanism that had lain idle for a thousand centuries. Then swiftly full control came, and the machine came charging toward the men.

They broke in wild panic before the onslaught of the metal monster. As an engine of war it was invincible. Six feet in height and nearly twenty feet in length, it maneuvered upon its jointed legs with bewildering speed and efficiency. A score of rodlike arms projected from the main trunk, arms that were equipped for nearly every purpose. Some ended in pincers, others in barbed points, and others in clusters of flexible metal tentacles.

One of the men screamed in terror and broke for the door back into the pit room. Foster flung him aside and slammed the door shut and locked.

"You'd be trapped like a rat in there," he grated. "Our only chance is to stick together and fight it out."

IT was a chance that seemed increasingly slight as they tried to close in upon the machine. Garrigan had recovered the other pistol from the floor. He emptied it into the metal monster at a range of less than ten feet but the bullets glanced harmlessly off as from armor plate.

The machine fought back with deadly efficiency. One of the dagger-pointed arms impaled a man like a speared fish. Pincers closed upon the neck of another, half tearing his head from his body. With the strength of desperation the men wrecked the pillars-and-diaphragm apparatus and from the debris tore metal fragments to serve as clubs. Their blows against the thing's pistonlike legs failed to even shake it. Two more men died before the grim efficiency of the stabbing arms.

Foster had held the remaining bullets in his own pistol, waiting for a chance to use them against some vulnerable spot in the machine, but he saw none. There was a bare chance that if he could gain the machine's back he might find some crevice through which he could send a telling shot. Cramming the pistol into his belt, he watched his chance, then used the debris of the wrecked apparatus as a stepping stone for a running leap that landed him solidly on top of the metal bulk just back of the crystal compartment.

He fumbled for the pistol in his belt, but before he could even touch it a tentacle-tipped arm lashed down toward him, picked him off the thing's back, and flung him with terrific force high into the air. . . .

FOR a breathless moment he saw the girders and cables of the ceiling hurtling toward him. Instinctively he grabbed with both hands at one of the lower girders as his body thudded into it. His clutching fingers slipped momentarily, then held, leaving him dangling there at arms' length thirty feet above the floor.

His wits swiftly clearing from the shock of that mighty toss through space, Foster scrambled up

on the narrow girder. Sitting astride the metal beam, he looked down at the scene below.

The battle down there was nearly over. The glowing slug in the machine was now obviously trying to capture the remaining men alive for further use. Instead of slaying, its lashing arms fought only to stun and cripple.

Six of the men still remained on their feet but they were trapped in an angle between heavy apparatus and one of the walls. In the central case the ten semi-dormant slugs, still too inactive to take part in the battle themselves, seemed watching the conflict with great unwinking eyes of crimson.

Foster groaned. The metal colossus was too powerful for their feeble efforts. It would take a bolt of lightning to have any effect upon that mighty engine of war. At the thought, Foster's heart leaped in sudden inspiration. There was lightning, the terrific electrical force of a spinning planet, in the cables up here among the girders, if he could only release it.

SLIGHTLY below his position and barely six feet away from him one of the main power cables of the cavern was suspended from heavy insulators. If the cable had ever had an insulating sheath around it the fabric had vanished during the centuries for the dull silver-colored metal was now completely bare.

If that naked cable could be dropped into contact with Layrch's machine-body, the entire power of one of the cavern's main lines would be grounded through the metal of the machine. The position of the cable with regard to where the machine was now, was perfect for the scheme. If Foster could sever the cable just opposite him there was an excellent chance that the longer one of the free ends would drop directly upon the machine.

And in his possession he had a possible means of severing that cable—the pistol that was still crammed in his belt. There were four shots remaining in the pistol. The cable was barely half an inch thick, but the range was so short that he could not very well miss. If the silver-colored metal was as soft as it looked, the heavy bullets should be enough to tear through it.

Foster thrust the pistol as close to the cable as he could reach. Then, with the muzzle scarcely a yard from the silver strand, he fired. The heavy bullet caromed from the cable's surface, but not before it had torn a gash nearly a third of the way through it.

There was a sudden cessation of activity below as the slug in the machine looked up at the sound of the shot. Swift inspiration seized Foster and he promptly sent his next shot down at the machine itself. The bullet glanced harmlessly off, but his ruse worked. Apparently believing that Foster was merely trying another futile attack upon it, the machine turned its attention back to the men it had cornered. Foster could be attended to later.

FOSTER slipped and nearly fell just as he fired at the power line the next time and his shot missed. That left him only one remaining cartridge. Aiming with infinite care he sent his last shot smashing squarely into the part of the cable remaining intact.

It trembled and sagged as the bullet cut the remaining metal nearly through. Only a bare thread was left, yet that thread held. Sick at heart over the narrow margin by which his effort had failed, Foster stared in despair at the nearly severed cable. It needed only one solid blow to tear that last thread

of metal apart, but the cable was just far enough away to be effectively beyond his reach.

Then suddenly Foster's eyes narrowed. There was a way remaining by which the weakened power line could be broken. A single hurtling dive out and downward from the girder would send his own body crashing squarely into the metal strand. Beneath the smashing impact of his one hundred and eighty pounds the nearly severed cable was certain to break.

Foster shuddered as he realized what that dive into space would mean. He was not thinking of the fall itself. The thirty-foot drop to the diamond-hard floor of the cavern would in all probability mean death or broken bones, but that was a hazard which Foster was willing to take.

It was the thought of what would happen in the brief moment of contact when his body met that bare cable that drained the color from Foster's face. There was the terrific electrical energy from a spinning world coursing through that silver strand, a force that in all probability was powerful enough to instantly char a human body to a glowing cinder!

IF he could only insulate his body at the point where it would touch the cable he might have at least a chance of surviving the contact. The only possible insulating medium he had was the clothing he wore—a pair of heavy corduroy trousers and the sleeveless remnant of a woolen shirt. They could be rolled into a bundle that would be bulky enough to at least give him some protection from contact with the bare cable.

Laying the empty pistol on the girder beside him, he stripped as quickly as his precarious perch would permit. Then, using the pistol as a central core to give body to the bundle, he swathed it deep within the folds of the clothing, making a thick roll that he could hold in his right hand as he leaped.

At best the insulating qualities of the roll would be far from perfect, yet it might serve to minimize the effects of the cable's charge enough to give him some chance of escaping alive. His contact with the power line would be only for the fractional part of a second and his body would be completely in the air at that time, out of direct contact with anything through which the cable's charge might ground.

Foster crouched on the girder, his eyes fixed upon the scene below as he tensely waited for the best moment to make the leap. The machine had shifted its position slightly while he had been stripping. It was now too far over the right to be under the cable when it fell.

For a moment as the machine maneuvered still farther over to the right in its conflict with the cornered men, Foster was afraid that his opportunity had passed. An idea came to him and he yelled directions. One of the men suddenly dashed to the left, apparently in a last frantic effort to escape the metal colossus. The machine flashed quickly over to head the fugitive off. The maneuver brought it for the moment directly under Foster's position.

Foster's muscles tensed swiftly, then flung his body headlong out into space. His aim was perfect. The bulky roll of cloth in his outstretched right hand struck the cable squarely with all the force of his hurtling body behind it.

There was a searing flash of blue flame as the last thread of the cable snapped, and a tearing flood of agony that blotted all consciousness from Foster's brain as his falling body hurtled on toward the cavern floor.

HE struggled slowly back to consciousness to find Garrigan and another of the men working over him. There was the stabbing pain of broken bones in his left ankle. With the men helping him, he sat up and looked around.

The scene was one of utter chaos and destruction. The falling cable had obviously found its mark on Layroh's machine-body and in its last furious convulsions the metal colossus had completely wrecked the great glass case in the center of the cavern floor.

The machine itself was now nothing more than a tangled heap of twisted metal. In its shattered crystal compartment was a torn blob of swiftly blackening gelatin—all that remained of Layroh, the Shining One. Other shredded figures of dead flesh marked where the ten half-awakened slugs had died in the wreckage of the glass-walled case.

And in the many tiers of small cells along the cavern's back wall were more figures of death. The severed cable had been the source of the energy that had kept those dormant figures alive. When that energy ceased death had come quickly. Those figures in the cells were no longer Shining Ones. Their bodies were already swiftly darkening in decay.

Foster smiled grimly as he looked around the cavern. There were scientific treasures here that would revolutionize a world. It was a fitting retribution for the Shining Ones. When they had destroyed Atlantis they had robbed Earth of countless centuries of scientific knowledge and progress. Now, here in the cavern that had at last become their tomb, they were leaving a legacy of science that would go far toward repaying that ancient debt.

Spying on Cancer Cells

SPYING on the mysterious life processes inside a living cell of the human body, slice by slice, like an architect's cross-sections of a house, but without damaging the cell or its living contents, is the latest accomplishment of the ultraviolet microscope of Francis F. Lucas.

Mr. Lucas' photographs of cell interiors have just been awarded the medal of the Royal Photographic Society of Great Britain, a medal which Mr. Lucas won once before for his equally remarkable microscopic photographs of the structure of living materials. Cells from a fragment of the tissue of a mouse cancer, for example, are placed on a slip of clear quartz and wetted with a chemical solution. Mr. Lucas then focuses the ultraviolet rays of his apparatus on one particular level inside one of these living cells, as though a gigantic microscope were focused at the level of the top of the dining table in a human dwelling. Cell walls and other structures above and below this focus level disappear.

The instrument photographs only what is at that level, as though the upstairs bedrooms and downstairs cellar of a dwelling were transparent and vanished from the picture, leaving visible only the food and dishes which happened to be at the precise level of the table top. Other cross sections can be photographed only a hundred-thousandth of an inch or so above or below this first one; like one cross-section of a house at the level of the table legs, another at the level of the heads of the diners, and so on.

In addition to the mouse cancer cells, Mr. Lucas has photographed brain cells and also, in co-operation with Dr. Mary B. Stark of Flower Hospital, the living sperm cells of grasshoppers in the act of reproduction. No cure for cancer is foreseen immediately from these experiments, but the new possibility of exploring the inside of a living cell which has "run wild" and become a cancer cell may yield clues, it is hoped, to the cause of this mysterious disease.

A Scientist Rises

By D. W. Hall

"The face of the giant was indeed that of a god. . . ."

ON that summer day the sky over New York was unflecked by clouds, and the air hung motionless, the waves of heat undisturbed. The city was a vast oven where even the sounds of the coiling traffic in its streets seemed heavy and weary under the press of heat that poured down from above. In Washington Square, the urchins of the neighborhood splashed in the fountain, and the usual midday assortment of mothers, tramps and out-of-works lounged listlessly on the hot park benches.

All gazed, frankfurt, at the vast form that towered above them.

As a bowl, the Square was filled by the torrid sun, and the trees and grass drooped like the people on its walks. In the surrounding city, men worked in sweltering offices and the streets rumbled with the never-ceasing tide of business—but Washington Square rested.

And then a man walked out of one of the houses lining the square, and all this was changed.

He came with a calm, steady stride down the steps of a house on the north side, and those who happened to see him gazed with surprised interest. For he was a giant in size. He measured at least eleven feet in height, and his body was well-formed and in perfect proportion. He crossed the street and stepped over the railing into the nearest patch of grass, and there stood with arms folded and legs a little apart. The expression on his face was preoccupied and strangely apart, nor did it change when, almost immediately from the park bench nearest him, a woman's excited voice cried:

"Look! Look! Oh, look!"

The people around her craned their necks and stared, and from them grew a startled murmur. Others from farther away came to see who had cried out, and remained to gaze fascinated at the man on the grass. Quickly the murmur spread across the Square, and from its every part men and women and children streamed towards the center of interest—and then, when they saw, backed away slowly and fearfully, with staring eyes, from where the lone figure stood.

THERE was about that figure something uncanny and terrible. There, in the hot midday hush, something was happening to it which men would say could not happen; and men, seeing it, backed away in alarm. Quickly they dispersed. Soon there were only white, frightened faces peering from behind buildings and trees.

Before their very eyes the giant was growing.

When he had first emerged, he had been around eleven feet tall, and now, within three minutes, he had risen close to sixteen feet.

His great body maintained its perfect proportions. It was that of an elderly man clad simply in a gray business suit. The face was kind, its clear-chiselled features indicating fine spiritual strength; on the white forehead beneath the sparse gray hair were deep-sunken lines which spoke of years of concentrated work.

No thought of malevolence could come from that head with its gentle blue eyes that showed the peace within, but fear struck ever stronger into those who watched him, and in one place a woman fainted; for the great body continued to grow, and grow ever faster, until it was twenty feet high, then swiftly twenty-five, and the feet, still separated, were as long as the body of a normal boy. Clothes and body grew effortlessly, the latter apparently without pain, as if the terrifying process were wholly natural.

The cars coming into Washington Square had stopped as their drivers sighted what was rising there, and by now the bordering streets were tangled with traffic. A distant crowd of milling people heightened the turmoil. The northern edge was deserted, but in a large semicircle was spread a fear-struck, panicky mob. A single policeman, his face white and his eyes wide, tried to straighten out the tangle of vehicles, but it was infinitely beyond him and he sent in a riot call; and as the giant with the kind, dignified face loomed silently higher than the trees in the Square, and ever higher, a dozen blue-coated figures appeared, and

saw, and knew fear too, and hung back awe-stricken, at a loss what to do. For by now the rapidly mounting body had risen to the height of forty feet.

AN excited voice raised itself above the general hubbub.

"Why, I know him! I know him! It's Edgar Wesley! Doctor Edgar Wesley!"

A police sergeant turned to the man who had spoken.

"And it—he knows you? Then go closer to him, and—and—ask him what it means."

But the man looked fearfully at the giant and hung back. Even as they talked, his gigantic body had grown as high as the four-storied buildings lining the Square, and his feet were becoming too large for the place where they had first been put. And now a faint smile could be seen on the giant's face, an enigmatic smile, with something ironic and bitter in it.

"Then shout to him from here," pressed the sergeant nervously. "We've got to find out something! This is crazy—impossible! My God! Higher yet—and faster!"

Summoning his courage, the other man cupped his hands about his mouth and shouted:

"Dr. Wesley! Can you speak and tell us? Can we help you stop it?"

The ring of people looked up breathless at the towering figure, and a wave of fear passed over them and several hysterical shrieks rose up as, very slowly, the huge head shook from side to side. But the smile on its lips became stronger, and kinder, and the bitterness seemed to leave it.

There was fear at that motion of the enormous head, but a roar of panic sounded from the watchers when, with marked caution, the growing giant moved one foot from the grass into the street behind and the other into the nearby base of Fifth Avenue, just above the Arch. Fearing harm, they were gripped by terror, and they fought back while the trembling policemen tried vainly to control them; but the panic soon ended when they saw that the leviathan's arms remained crossed and his smile kinder yet. By now he dwarfed the houses, his body looming a hundred and fifty feet into the sky. At this moment a woman back of the semicircle slumped to her knees and prayed hysterically.

"Someone's coming out of his house!" shouted one of the closest onlookers.

THE door of the house from which the giant had first appeared had opened, and the figure of a middle-aged, normal-sized man emerged. For a second he crouched on the steps, gaping up at the monstrous shape in the sky, and then he scurried down and made at a desperate run for the nearest group of policemen.

He gripped the sergeant and cried frantically:

"That's Dr. Wesley! Why don't you do something? Why don't—"

"Who are you?" the officer asked, with some return of an authoritative manner.

"I work for him. I'm his janitor. But—can't you do anything? Look at him! Look!"

The crowd pressed closer. "What do you know about this?" went on the sergeant.

The man gulped and stared around wildly. "He's been working on something—many years—I don't know what, for he kept it a close secret. All I know is that an hour ago I was in my room upstairs, when I heard some disturbance in his laboratory, on the ground floor. I came down and knocked on the door, and he answered from inside and said that everything was all right—"

"You didn't go in?"

"No. I went back up, and everything was quiet for a long time. Then I heard a lot of noise down below—a smashing—as if things were being broken. But I thought he was just destroying something he didn't need, and I didn't investigate: he hated to be disturbed. And then, a little later, I heard them shouting out here in the Square, and I looked out and saw. I saw him—just as I knew him—but a giant! Look at his face! Why, he has the face of—of a god! He's—as if he were looking down on us—and—pitying us. . . ."

For a moment all were silent as they gazed, transfixed, at the vast form that towered two hundred feet above them. Almost as awe-inspiring as the astounding growth was the fine, dignified calmness of the face. The sergeant broke in:

"The explanation of this must be in his laboratory. We've got to have a look. You lead us there."

THE other man nodded; but just then the giant moved again, and they waited and watched.

With the utmost caution the titanic shape changed position. Gradually, one great foot, over thirty feet in length, soared up from the street and lowered farther away, and then the other distant foot changed its position; and the leviathan came gently to rest against the tallest building bordering the Square, and once more folded his arms and stood quiet. The enormous body appeared to waver slightly as a breath of wind washed against it: obviously it was not gaining weight as it grew. Almost, now, it appeared to float in the air. Swiftly it grew another twenty-five feet, and the gray expanse of its clothes shimmered strangely as a ripple ran over its colossal bulk.

A change of feeling came gradually over the watching multitude. The face of the giant was indeed that of a god in the noble, irony-tinged serenity of his calm features. It was as if a further world had opened, and one of divinity had stepped down; a further world of kindness and fellow-love, where were none of the discords that bring conflicts and slaughterings to the weary people of Earth. Spiritual peace radiated from the enormous face under the silvery hair, peace with an undertone of sadness, as if the giant knew of the sorrows of the swarm of dwarfs beneath him, and pitied them.

From all the roofs and the towers of the city, for miles and miles around, men saw the mammoth shape and the kindly smile grow more and more tenuous against the clear blue sky. The figure remained quietly in the same position, his feet filling two empty streets, and under the spell of his smile all fear seemed to leave the nearer watchers, and they became more quiet and controlled.

THE group of policemen and the janitor made a dash for the house from which the giant had come. They ascended the steps, went in, and found the door of the laboratory locked. They broke the door down. The sergeant looked in.

"Anyone in here?" he cried. Nothing disturbed the silence, and he entered, the others following.

A long, wide, dimly-lit room met their eyes, and in its middle the remains of a great mass of apparatus that had dominated it.

The apparatus was now completely destroyed. Its dozen rows of tubes were shattered, its intricate coils of wire and machinery hopelessly smashed. Fragments lay scattered all over the floor. No longer was there the least shape of meaning to anything in the room; there remained merely a litter of glass and stone and scrap metal.

Conspicuous on the floor was a large hammer. The sergeant walked over to pick it up, but, instead, paused and stared at what lay beyond it.

"A body!" he said.

A sprawled out dead man lay on the floor, his dark face twisted up, his sightless eyes staring at the ceiling, his temple crushed as with a hammer. Clutched tight in one stiff hand was an automatic. On his chest was a sheet of paper.

The captain reached down and grasped the paper. He read what was written on it, and then he read it to the others:

THERE was a fool who dreamed the high dream of the pure scientist, and who lived only to ferret out the secrets of nature, and harness them for his fellow men. He studied and worked and thought, and in time came to concentrate on the manipulation of the atom, especially the possibility of contracting and expanding it—a thing of greatest potential value. For nine years he worked along this line, hoping to succeed and give new power, new happiness, a new horizon to mankind. Hermetically sealed in his laboratory, self-exiled from human contacts, he labored hard.

There came a day when the device into which the fool had poured his life stood completed and a success. And on that very day an agent for a certain government entered his laboratory to steal the device. And in that moment the fool realised what he had done: that, from the apparatus he had invented, not happiness and new freedom would come to his fellow men, but instead slaughter and carnage and drunken power increased a hundredfold. He realised, suddenly, that men had not yet learned to use fruitfully the precious, powerful things given to them, but as yet could only play with them like greedy children—and kill as they played. Already his invention had brought death. And he realised—even on this day of his triumph—that it and its secret must be destroyed, and with them he who had fashioned so blindly.

For the scientist was old, his whole life was the invention, and with its going there would be nothing more.

And so he used the device's great powers on his own body; and then, with those powers working on him, he destroyed the device and all the papers that held its secrets.

Was the fool also mad? Perhaps. But I do not think so. Into his lonely laboratory, with this marauder, had come the wisdom that men must wait, that the time is not yet for such power as he was about to offer. A gesture, his strange death, which you who read this have seen? Yes, but a useful one, for with it he and his invention and its hurtful secrets go from you; and a fitting one, for he dies through his achievement, through his very life.

But, in a better sense, he will not die, for the power of his achievement will dissolve his very body among you infinitely; you will breathe him in your air; and in you he will live incarnate until that later time when another will give you the knowledge he now destroys, and he will see it used as he wished it used—E. W.

THE sergeant's voice ceased, and wordlessly the men in the laboratory looked at each other. No

comment was needed. They went out

They watched from the steps of Edgar Wesley's house. At first sight of the figure in the sky, a new awe struck them, for now the shape of the giant towered a full five hundred feet into the sun, and it seemed almost a mirage, for definite outline was gone from it. It shimmered and wavered against the bright blue like a mist, and the blue shone through it, for it was quite transparent. And yet still they imagined they could discern the slight ironic smile on the face, and the peaceful, understanding light in the serene eyes; and their hearts swelled at the knowledge of the spirit, of the courage, of the fine, far-seeing mind of that outflung titanic martyr to the happiness of men.

The end came quickly. The great misty body rose; it floated over the city like a wraith, and then it swiftly dispersed, even as steam dissolves in the air. They felt a silence over the thousands of watching people in the Square, a hush broken at last by a deep, low murmur of awe and wonderment as the final misty fragments of the vast sky-held figure wavered and melted imperceptibly—melted and were gone from sight in the air that was breathed by the men whom Edgar Wesley loved.

IN THE NEXT ISSUE

The Fifth-Dimension Tube

A Thrilling Sequel to the Immensely Popular "The Fifth-Dimension Catapult"
—A Complete Novelette—

By Murray Leinster

Under Arctic Ice

An Exciting Story of a Resourceful Young Torpooner's Desperate Attempt to Free the Crew of a Mighty Submarine, Trapped on the Arctic Floor by Strange Denizens of the Polar Sea

By H. G. Winter

Other Outstanding Stories, of Course

And

—In Response to Repeated Requests from an Overwhelming Number of Our Readers—the Initial Appearance of Two New Science Features!

All his strength went into that trick.

When the Sleepers Woke

By Arthur Leo Zagat

"PREPARE for battle!" The command crackled in Allan Dane's helmet. "Enemy approaching from southeast! Squadron commanders execute plan two!" Allan settled back in the seat of his one-man helicopter, his broad frame rendered even bulkier by the leather suit that incased it. He was tensed, but quiescent. Action would be first joined sixty miles away, and his own squadron was in reserve.

Over New York and its bay the American air fleet was in motion. Suddenly movement ceased, and the formation froze. Ten flying

Only two small groups of people—enemies—survive the vast desolation of the Final War.

forts were each the apex of a far-spread cone, axis horizontal, whose body was the fanned back-ranging of its squadron of a thousand helicopter planes. The cones bristled oceanward from the sea-margin of New York, their points a fifty-mile arc of defiance, their bases tangent to one another, almost touching the ground at their lower edges, then circling upward for ten thousand feet. From van to rear each formation was five miles in length.

Behind and above, the main body of the fleet sloped in echeloned ranks, hiding the threatened city with an impenetrable terraced wall of buzzing helicopters and massive forts. Up, back, up, back, the serried masses reached, till the rearmost were twenty-five thousand feet aloft. And farther behind, unmoving on their six-mile level, were the light 'copters of the reserve. Dane gazed down that tremendous vista to the far-off front line, and swore softly. Just his luck to be out of the scrap; the enemy would never penetrate to these northern outskirts of New York.

"Men of the fleet!" General Huntington's voice sounded from his flagship, the *Washington*. Somehow its gruffness overrode the mechanical quality of the intra-fleet radio transmission. Almost it seemed he was there in the tiny cabin. "Reports have at this moment been received that our attack fleets have been everywhere successful. Our rocket ships have destroyed Tokio, Addis Ababa, Odessa, Peiping and Cape Town, and are now ranging inland through enemy territory."

Even through the double leather of his helmet a roar came to Allan. He felt his craft vibrate to the exultant cheers of the fleet. His own mouth was open, and his throat rasping. . . .

"*But*"—the single syllable choked the surge of sound—"London, Paris, and Berlin have fallen to the enemy." The words thudded in the pilot's ear-phones. "San Francisco is being attacked. Communication with New Orleans has failed. The enemy are in sight of Buenos Aires—" The general broke off, and Allan sensed dully that there was other news, news that he dared not give the fleet.

The gruff voice changed. "Men of the fleet, New York is in our charge. The enemy is upon us, the battle is commencing. The issue is in your hands."

PAT on his last word, a dark cloud spread along the south-eastern horizon. From the spear-heads of the cone formations great green beams shot out across the sea. Orange flame flared in answer, all along the black bank that was the enemy fleet. Where the green beams struck the orange blinked out, and the blue of sky showed through. And the American ships were as yet untouched. A great shout rose to Allan's lips—that they had the range on the enemy, and the attack defeated before it was well begun.

But was it? Swift as the American rays scythed destruction along the enemy line, the gaps filled and lethal orange leaped out again. Now the black cloud was piling up, was rising till it was a towering curtain against the sky. On it came, like some monstrous tidal wave. Great rents were torn through it by the stabbing beams of the flying forts, holes where ships and men had been whiffed into dust by the hundred. But the attack came on.

Now all the great defensive cones burst into an emerald blaze as the smaller ships loosed their bolts. And from the terraced slope of the supporting fleet a hundred steel ovoids lumbered forward to meet the threat. All the vast space between the hosts, mountain-high from the sea's surface, was filled with dazzling light, now green, now

orange, as the conflicting beams crossed and mingled. There were gaps in the advancing curtain that did not fill, but the defending cones were melting away, were disappearing, were gone.

"Flight ZLX prepare for action!" Dane's eyes flicked over the gages, checking in routine precaution. He started when he saw the V of the chronometer's hands. Only six minutes had passed since the battle's start—it seemed hours. And already the reserve was being called on! He was suddenly cold. Out there, over the bay, the enemy forces had ceased their advance. The American first line cones were gone—true enough, but the support fleet was still intact. Some new element had entered the battle, visible as yet only in the *Washington's* powerful television view-screens. The flight adjutant's voice again snapped a command:

"Direction vertical. Thirty thousand feet. Full speed. Go!"

Dane jerked home his throttle. The battle shot down, and his seat thrust up against him. Something hurtled past, blurred by the speed of its descent. The plane rocked to a sudden detonation, and Allan fought to steady it. Then he had reached the commanded height. At sixty thousand feet the helio vanes were useless, only the power of the auxiliary rocket-tubes maintained his altitude.

"Formation B. Engage the enemy!" came the order.

THEY were just ahead, a dozen giant craft, torpedo-shaped and steel-incased, the scarlet fire of their gas blasts holding them poised steady in their fifty-mile-long line. From curious swellings that broke the clean lines of their underbodies black spheres were dropping in steady streams. Allan knew then whence came the crash that had rocked his ship as she rose. These were bombs, huge bombs, charged with heaven alone knew what Earth-shaking explosive. They were catapulting down, an iron death hail, on the fleet and the city twelve miles below!

The enemy's strategy was clear. While his main fleet was engaging the American defense in a frontal attack, these huge rocket-bombers had looped unseen through the stratosphere to this point of vantage. The planes that had leaped to this new menace swept toward the bombers in three parallel lines, above, to right and left of them, Allan's plane leaping to position at the very end of one long line. The three leaders reached the first rocket-ship, and their green beams shot out. In that instant the enemy craft seemed to explode in intense blue light. Then the awful dazzle was gone. The rocket ship was there, just as before, but the American helio-planes were gone, were wiped out as though they had never been. The next trio, and the next, rushed up. Again and again came that flash of force, annihilating them. Superbly the tiny gnats that were the American planes plunged headlong at the bovering Leviathan of the air and were whiffed into nothingness. Sixty brave men were dancing motes of cosmic dust before the shocked commander could sound the recall.

The helicopter squadron curved away, still keeping its ordered lines, but orange flame leaped out from all twelve of the enemy vessels, orange flame that caught them, that ran along their ranks and sent them hurtling Earthward — blackened corpses in blazing coffins. "Abandon ships!" The adjutant's last order crisped, coldly metallic, soldierly as ever. In the next breath, as Allan reached for the lever that would open the trapdoor beneath him, he saw the command-ship plunge down, a flaring comet.

ABOVE Allan Dane, the twenty-foot silk of his parachute bellied out in the denser air of the lower heights. His respirator tube was still in his mouth, and the double, vacuum-interlined leather of his safety suit had kept him from freezing in the spatial cold of the stratosphere. He looked south.

All the proud thousands of the defense fleet were gone, blown to fragments by the time bombs from above. The city was hidden in a thick, muddy-yellow fog. "Queer," the thought ran through his brain, "that there should be fog in mid-afternoon, under a blazing sun." Then he saw them, the circling black ships of the enemy, trailing behind them long wakes of the drab yellow vapor that drifted heavily down to shroud New York with—gas!

Allan felt nauseated as he imagined a fleeting picture of the many-leveled city, of its mist-darkened streets with swarming myriads of slumped bodies clogging the conveyor belts that still moved because no hand was left to shut them off; of women and children, and aged or crippled men strewn in tortured, horrible attitudes in all the roof-parks, in their homes, in every nook and cranny of the murdered city. He looked beneath his drifting descent and saw roads that were rivers, alive with every manner of fleeing conveyance, and he groaned, knowing that in moments the pursuing ships would send down their lethal mist to put an end to that futile flight.

Sugar Loaf Mountain rose toward him. At its very summit was a clearing among the trees, and, incongruously motionless in that world where every one was rushing from inescapable death, a man stood calmly there, gazing up at him. Allan screamed down to him! "Run! You fool. Run or the gas will get you!"

Of course the man could not hear that cry, but one tiny arm rose and pointed south. Allan followed the direction of the gesture and saw a black plane veering toward him. Then orange flared from it, though it was distant, and a wave of intolerable heat enveloped him. Something cried within him: "Too far—he's too far off to kill me with his beam!" Then he knew no more.

FROM New York, from devastated San Francisco, from Rio, from Buenos Aires, from fifty other desolated points along the seaboards of the Americas, the black fleets swept along the coasts and inland, vomiting their yellow death till all the continents were blanketed with life-destroying gas. And in Europe and Australasia the destroying hordes, having smashed the proud defenses of the coastlines, engaged in the same pursuit, till in one short week all the lands of the Western Allies were swept clear of life. Then the Eastern ships turned homeward, to wait until the vapor they had strewn had lost its virulence, and the teeming masses of the East might take possession of the half world the ebony-painted destroyers had conquered. The black fliers turned homeward, but there was no homeland left for them to seek!

For though the defense fleets of the Western Coalition had been everywhere beaten, their attack squadrons had been everywhere successful. All Asia and Africa lay under a pall of milky emerald gas as toxic, as blasting, as the Easterners' yellow.

And the Westerners were returning too!

In their televiews screens the commanders of the black swarms, and of the white thousands, sought their home ports, and saw the world to be a haze-covered sphere where not even a fly could live. Then, as

if by common accord, the white ships and the black spun across lifeless hemispheres to meet in mid-air over the long green swells of the Pacific. They met, and on the instant they were at each others' throats like two packs of wild dogs, killing, killing, killing till they themselves were killed. No quarter was asked in that fight, and none given. No hope of victory was there, nor fear of defeat. Better swift death in the high passion of combat, than slow, hopeless drifting over a dead world.

But there was one black ship that slunk out of that mass suicide of man's last remnant. Within its long hulk three motionless forms lay in a welter of blood that smeared their officers' badges, and a dozen gibbering men labored at the controls of their craft. The long black shadows came at last to veil an empty sky, and a sea whereon there was drifting wreckage but not one sign of any life. And as far to the north a shadowed airship sped athwart the moon, searching for one spot, one tiny patch of solid ground, that was free from the dread gas.

• • •

CONSCIOUSNESS came slowly back to Allan Dane. At first he was aware, merely, that he was alive. That was astonishing enough. Even if the orange beam had not killed him with its heat, the gas should have struck his leather suit. The Easterners could not be behind his own forces in their development of that terrible weapon.

Allan felt a coolness on his face, his hands, that could mean only that his helmet and gloves had been removed. He heard movement, and opened his eyes.

At first he could see only blueness, pale and lambent. He gazed dully up at a lustrous, glasslike substance that arched above him. The sound of some one moving came again, and Allan turned his head to it. His neck muscles seemed stiff, that simple motion drew tremendously on his strength.

About fifteen yards away, a man bent over a transparent, boxlike contrivance in which something fluttered. From this device a metal tube angled away into the wall. There was other apparatus on the long table at which the man was—

"At last! Clear at last!" a mellow, rounded voice exclaimed jubilantly.

"Clear? Are you sure, Anthony, are you sure?" This other voice, throbbing with vibrant repression as if its owner feared to believe longed-for tidings come at last, was a woman's. As the man half turned, its owner came between him and Allan. All he could see of them was that the one called Anthony was very tall, and thin, and the woman almost as tall, and that both wore hooded white robes, the woman's falling to her heels, the man's to his knees, waist-girdled with black cords.

"Look for yourself, Helen."

She bent over the transparent cage. "Oh Anthony, how wonderful!"

Allan attempted to rise. He was unutterably weak; to move a finger was a gigantic task, to do more impossible. He tried to call out. No sound came from his straining throat.

The couple straightened. The man spoke, too low for Dane to hear. Each took something from the table, something that gleamed metallically. Then they turned—and Allan saw what the white robes clothed!

SKULLS leered at him from beneath the hoods—fleshless skulls, tinted a pale green! Jutting jawbones, cavernous cheeks, lipless mouths that grinned mirthlessly—his eyes froze to them and a scream formed within him that he could not utter. Hands appeared from

within the flowing sleeves, and they were skeleton hands, each phalanx clearly marked. They moved, that was the worst of it, the hands moved; and deep in the shadowed eye-pits of the skulls blue light glowed in living eyes that peered at something to Allan's right.

His eyes followed the direction of their gaze. Ranged along the wall, and jutting out, he saw four couches. On each was a figure, shrouded and hooded in white. Utterly still they were—and the cadaverous countenances exposed between robe and hood betrayed not the slightest twitch. The arms were crossed on each breast. Allan realized that his own arms were similarly crossed. He looked down at them, saw the white gleam of a robe that fell down his length in smooth, still folds, saw his hands—greenish skin stretched tight over fleshless bones. Suddenly it seemed to him that the air was musty and fetid.

Footsteps slithered across the floor. The woman-form bent over the farthest couch. With one skeleton hand she bared an arm of the corpselike figure; the other hand lifted—metal glinted in it and plunged into the unshrinking limb! A slow movement of the bony fingers and the threadlike, silvery thing was withdrawn. She stared ghoulishly—and the man, too, gazed tensely at her victim. A long quiver ran through the recumbent shape, another. The death's-head on the pallet moved slightly—and merciful blackness welled up in Allan's brain. . . .

A COOL liquid was in his mouth. He swallowed instinctively, and warmth ran through his veins. He felt strength flooding back into him—and he remembered horror.

"That's better," a mellow voice said, close above him. "Drink just a little more." The cool liquid came up against Allan's lips again, pungent, and he drank. Once more strength surged warmingly within him. "That's a good fellow. A little more now."

Fingers were on Allan's wrist, life-warm. There was friendliness in the voice that was speaking to him, and solicitude. He dared to look.

A skull-like head was right before him. But seen thus closely, the terror of it was lessened. Fleshless indeed it was. But a parchment skin was tightly drawn over the bones, and Allan could see that its true shade was a sere yellow. It was the bluish light that had given it the green of decay. The deep-sunk eyes were kindly; they gleamed with pleasure as Allan's opened; and the voice asked:

"How do you feel?"

Allan made shift to reply, though a strange lassitude still enervated him, and his mouth was full of tongue. "Much better, thank you. But who— who . . . ?"

With a sudden access of energy Allan sat up on his couch. He looked about him, and his fears were back full flood.

He was in a chamber with neither door nor window—floor, walls, and arched ceiling entirely formed of the palely lustrous, glasslike substance. The room was perhaps twenty by forty feet, its ceiling curving to about five yards from the floor at its highest point, and the spectral blue glow that filled it was apparently sourceless. It lit three vacant couches to his left. To his right were the four he had already seen. The woman was ministering to the occupants of these—living skeletons that lay flaccid, but whose heads were moving, barely moving from side to side. Like nothing else but a sepulcher the place seemed, a tomb in which the dead had come to life!

ALLAN clutched at Anthony's arm, grasped textured fabric that was cold to his frantic touch, and thin bone beneath. "In Heaven's name," he mouthed, "tell me what sort of place this is before—" He stopped, appalled by a sudden thought. Perhaps he was insane, this seeming tomb really some hospital ward transformed by his crazed brain. A wave of weakness overcame him, and he fell back.

"Careful," the other spoke soothingly, "you must give the plasma time to act or you may harm yourself."

If Allan shut out sight with his eyelids, and listened only to the resonance of Anthony's voice, he could hold his slipping grip on reason. He felt that the cloth of his robe was metal, fine spun and woven. That was strangely reassuring.

"How long do you think you have slept?"

"How long?" Dame murmured. Something told him that he had been unconscious for a long time. "A week?"

Anthony sighed. "No. Longer than that, much longer." There was reluctance in his tone. "You have lain here for twenty years."

Allan's eyes flew open, and he stared up into the speaker's face. Twenty years! Somehow it did not occur to him to disbelieve this astounding statement. He struggled hard to realize its implication. Two decades had passed since last he remembered. He had been a youth then. Now he was forty-four.

Anthony continued. "That may be a shock to you, but this will be a greater. Unless I am greatly mistaken, we seven, we four men and three women, are the only living humans left on Earth."

The words dripped into Allan's consciousness. Beyond them, he could hear movements, exclamations. But they meant nothing to him. Only the one thought tolled, knell-like, within him. "We seven are the only living humans left on Earth."

DIMLY he knew that Anthony was talking. "There is a possibility, a bare possibility, that somewhere near here there are two others. That chance is faint indeed. Otherwise humanity is dead, killed by its own hand."

Through a dizzy vertigo that blurred sight and sound Allan heard the rounded voice go on and on, telling the story of the doom that Man's own folly had brought. And intermingled with that tale of a world gone mad there came back to the listener the clear-cut vision of the day of horror that to him seemed but yesterday. He remembered the sudden ultimatum of the Easterner's, the Western Coalition's stanch defiance. Again he saw a supposedly invincible fleet utterly destroyed, saw comrades whiffed out of existence in infinitesimal seconds. Again he watched a city of twenty millions inundated by a muddy yellow gas in which no human being, no animal, might live. He waked once more to find himself helpless with weakness, among living corpses, in a place that seemed a tomb.

"All this we saw in our long-distance televisoscope." Anthony gestured to a blank screen above the apparatus ranged along the opposite wall. "Then, just as that last weird battle ended, something happened to the eye-mast outside, and we were isolated." He fell silent, in a brooding reverie, and Allan, recovered somewhat, saw that the other strange occupants of the place had risen and were clustered about that cage where something fluttered.

He turned to his mentor. "But I still don't understand. How is it that we escaped the holocaust?"

"Four of us, members of the scientific faculty of the National University, having foreseen the inevitable result of the course of world events, had joined forces and developed a substance—we called it nullite—so dense and so inert that no gas could penetrate it or chemical break it down. We offered it to the Western General Staff, and were laughed at for our pains. Then we decided to use it to preserve our families from the danger we foresaw.

"At first we sheathed one room in each of our own dwellings with the nullite. Later we decided that the deposited gas might last for many years, and blasted out this cave, a hundred feet below the summit of Sugar Loaf Mountain, for a common refuge.

"When the red word flared from the newscast machines, 'War!' we fled here with our wives, as we had planned. All, that is, save one couple, the youngest of us. They never arrived—I waited for them in the clearing at the entrance to the shaft. At the last moment I saw you dropping in your parachute, saw the death beam just miss you, saw you land at my feet, unconscious, but still breathing. I carried you in with me. There were two vacant spaces: you could occupy one of them. Then we sealed the last aperture with nullite, and settled to our vigil. We did not know how long the gas would last, but we had sufficient concentrated food, and enough air-making chemicals, to last two persons for a century."

"Two people," Allan interjected. "But there were seven here."

ANTHONY nodded. "We had worked out every detail of our plan. When release came we needs must be in the full vigor of our prime. From our loins must spring the new race that will repopulate the Earth; that will found a new civilization, better, we hope, and wiser than the one that has died. By injecting a certain compound we suspended animation in all but a single couple. Those so treated were to all intents dead, though their bodies did not decay. The two who remained awake kept watch, making daily tests of the outside atmosphere, drawn through tubes of nullite that pierced the seal. At the end of six months they revived another couple by the use of a second injection, and were themselves put to sleep. We exempted you from the watch, since you could have no companion, so that while we have lived about seven years in the twenty, you have not aged at all."

"Not aged at all!" Dane exclaimed. "Why, I have wasted away to a mere bagful of bones, and you others also."

The other smiled wistfully. "Even though life was the merest thread there was still an infinitely slow using of bodily tissue. But the drink we partook of as we awoke is a plasma that will very quickly restore the lost body elements. In an hour we shall all have been rejuvenated. You will be again the age you were on that fateful day in 2163, and the rest of us but seven years older. Look!" He moved aside, so that Allen could see the others, who had gathered around his couch. They were a curious semicircle of gaunt figures, but he could see that they had subtly changed. Still emaciated beyond description, they were no longer simulacra of death. The contours of their faces were rounding, were filling out, and the faintest tinge of pink was creeping into the yellow of their skins.

"Anthony, isn't it time that we opened the seals and went outside? Haven't we been long enough in this prison?" It was a short man who spoke, his voice impatient,

and there was an eager murmur from the others.

"I am as anxious as you." Anthony's slow words were dubious "But it may still be dangerous. The gas may have cleared away only from our immediate vicinity. In hollows, or places where the air is stagnant, it may still be toxic. It is my opinion that only one should go at first, to investigate."

A babble of volunteering cries burst out, but Dane's voice cut through the others. "Look here," the sentence tumbled from his lips. "I'm an extra here. It doesn't matter whether I live or die—I have no special knowledge. I cannot even father a family, since I have no wife. I am the only one to go out as long as there is danger."

"The young man is right," some one said. "He is the logical choice."

"Very well," agreed Anthony, who appeared the leader. "He shall be the first."

HIS instructions were few. One plane had been preserved, and was in the shaft. Allan was to make a circuit of the neighborhood. If he deemed it safe he was to visit the building, described to him, where the fourth couple had lived, and see if he could find a trace of them. Then he was to return and report his findings.

All stuffed their ears with cotton wool, and crowded against one end of the chamber. Anthony had the end of a long double wire in his hand, and it curled across the floor to the farther wall. He pressed the button of a pear-switch—and there was a concussion that hurled the watchers against the wall behind them. A great gap appeared in the farther wall, beyond it a black chasm, and a helicopter that was dimly illumined by the light from within the room. A quick inspection of the flier revealed that its alumino-steeloid had been unaffected by the passage of time, and Allan climbed into it. A wave of his hand simulated an insouciance he did not feel. Then he was rising through darkness. The sun's light struck down and enveloped him, and he was in the open air. He rose above the trees.

Desolation spread out beneath him. In all the vastness that unfolded as the lone 'copter climbed into a clear sky, nothing moved. The air, that from babyhood Allan had seen crowded with bustling traffic, was a ghastly emptiness. Not even a tiny, wheeling speck betrayed the presence of a bird. And below—the gas that was fatal to animal life seemed to have stimulated vegetable growth—an illimitable sea of green rolled untenanted to where the first ramparts of New York rose against the sky. Roads, monorail lines, all the countless tracks of civilization had disappeared beneath the green tide. Nature had taken back its own.

Heartsick, he turned south, and followed the silver stream of the Hudson. The river, lonely as the sky, seemed to drift oily and sluggish down to plunge beneath the city at the lower end of the Tappan Zee. Allan Dane came over New York, gazed down at the ruin of its soaring towers, at the leaping arabesque of its street bridges. He peered into vast rifts of tumbled, chaotic concrete and steel. Nothing moved in all that spreading wonder that had housed twenty millions of people.

Allan drifted lower, and saw that from what had been gardened roof-parks, now a welter of strewn earth, the green things had spread till they covered the heaped jetsam with a healing blanket of foliage. Not all the city had been laid waste, however. Here and

there, great expanses of the cliff-like structures still stood, undamaged, and in the midst of one of these areas he saw the high-piled edifice to which he had been directed. Its roof was lush with vegetation but by dextrous handling he set his helicopter down upon it.

The engine roar diminished and died. Silence folded around him, a black, thick blanket.

DANE got heavily from his seat, oppressed by the vast soundlessness, and pushed through curling plants that caught at his heels. The sound of his passage was like crackling thunder. A decaying door was marked, in faded, almost undecipherable letters, "Emergency Stairs." It was half open, and Allan squeezed around its edge. Spiral steps curved down into blackness. He hesitated a moment. He could *feel* the awful silence, the emptiness below was a pit of death. Anthony's words came back to him, echoed in his ears: "We seven are the only living humans left on Earth."

In that moment, out of the pitch-black well of soundlessness, a scream shrilled! No words, only a red, thin thread of sound, rising, and falling, and rising again out of depths where not even a living mouse should be! It came again, ripping the silence—a woman's scream, high-pitched, quivering with fear!

Allan plunged down into the darkness, caroming from wall to wall as he half ran, half fell, down the twisting stairs. Another sound reverberated from unseen walls, and Dane realized that it was his own voice, shouting.

His feet struck level floor. A pale rectangle of light showed before him, and he dived through it. He was in a corridor, dim-lit by phosphorescent fungi that cloaked the damp walls. He halted, at fault. The long hall stretched away to either side, cluttered with grimed bones, slimy with mold. By the age-blistered name cards on closed doors he knew himself to be on a residential level. But which way should he turn? Whence had come that scream? He crouched against the wall, his heartbeats thudding loud in his ears, and listened for a clue.

A muffled sound of scuffling came from his left. Allan whirled toward it and sped down the corridor. He was breathing in great gasps, and the air he breathed was thick and musty. Too late to stop, he saw a slick of green slime on the floor. His foot struck it, flew out from under him, he fell and slid headlong.

Something stopped him, something that crunched sickeningly as his sliding body crashed into it: two skeleton forms, clasped in each others' arms, moldering fabric hanging in rags from them. They lay across the threshold of a door, and just within Dane heard snarls, snufflings, bestial growls, the sounds of a struggle. Something thumped against the door and fell away. He heaved to his feet and his hand found the doorknob. But suddenly he was powerless to turn it. Panic tugged at him with almost palpable fingers, drove him to go back to his plane and safety. Almost he fled—but he remembered in time that it was a *human* scream he had heard.

THE portal gave easily to his lunge. Bluish light flooded the chamber, dazzling after the fungous dimness. A bulking form, whether ape or man he could not make out, so brutish the face, so hairy the dark body revealed by its tattered rags bent over the sprawled shape of a girl. Dane saw her in a fleeting glimpse—the slim

length of her, the tumbled, golden hair half hiding, half revealing white curves of beauty, a shoulder from which the tunic had been torn away. Then her attacker whirled toward the intruder. Allan leaped from the threshold, his fist arcing before him. The blow landed flush on the other's jaw

Yellow, rotted fangs showed in a jet-black face, and the huge Negro lunged for Dane, roaring his rage. Before the American could dodge or strike again the other's long arms were around him. Allan was jerked against a barrel chest, felt his bones cracking in a terrific hug. Eyes, tiny and red, stared into his. Dane drove knees and fists into the Negro, but the awful pressure of those simian arms across his back increased till he could no longer breathe. The American was almost gone, the black face blurred, and the continuous snarling of the brute was dull in his ears.

Suddenly Dane went limp. Victory flashed into the red eyes. The squeezing arms relaxed, and in that moment Allan's legs curled around the black's, heels jerking into the hollows behind his captor's knees. At the same instant, levering from that heel hold, Dane butted sharply up against the rocky jaw. All the strength that was left in him went into that trick, and it worked! The Negro crashed backward to the floor. Allan twisted, and rolled free. He was up, looking desperately around for some weapon. But it was not needed; the hulk on the floor never moved. The back of the Negro's head had smashed against the floor, and he was out.

Dane turned and bent to the girl. She, too, was motionless, but to his relief her breast rose and fell steadily. He glanced about looking for water to revive her. Then he saw that this room was sheathed with nullite. Then this was one of the chambers prepared before the plans were changed. But the girl could not be of the fourth couple—the missing two that had never appeared. She was no more than eighteen. And whence had come the giant black who had attacked her?

"Stick up your hands. Quick!"

ALLAN whirled to the sudden challenge. The man in the doorway was pointing a ray-gun steadily at him! Dane's hands went up, and he gasped inanely: "Who you?"

"What is going on here? Where did you come from?" The newcomer's English was precise, too precise. No hulking brute, this. A yellow man, slitted eyes slanted and malevolent; broad, flat nose above thin lips that were purple against the saffron skin. The uniform he wore showed signs of some attempt to keep it in repair, and to its threadbare collar still clung a tarnished insignia: the seven-pointed star, emblem of the enemy Allan had fought on a yesterday that was two decades gone.

"Well? Have you lost the power of speech?" The ray-gun jerked forward impatiently.

An obscure impulse prompted Allan's reply "Almost. I've spoken to no one for twenty years."

"So-o,"—softly. The Oriental's eyes flicked past Dane, and a sudden light glowed in them. "You have been alone for twenty years in this city we thought was empty, but you were on hand to fight with Ra-Jamba for this delightful creature." Something leered from his face that sent the hot blood surging to Allan's temples. The Easterner stepped catlike into the room, shutting the door behind him with his free hand.

"That is true," the American said, with what calmness he could

muster. Through the dizzy whirl of his mind he clung to one thought: he must conceal the existence of the little group on Sugar Loaf Mountain at all costs "I had just discovered that it was safe to leave the room, similar to this, in which I had hidden from the gas, when I heard a scream. I reached here just in time to—"

"To interfere with Ka-Jamba's pleasure, and save the little white dove—for me. My thanks." The yellow man bowed mockingly. "Too bad," he purred, "that you should be robbed of the spoils of your fight." Then he asked irrelevantly. "So some of you Americans found a way to cheat our gas. How many?"

Allan temporized There had been several similar refuges prepared, he said, but he did not know whether they had been used. This was the first he had visited beside his own. But how was it that the questioner knew so little about what had happened here? Had his people simply laid this country waste and never revisited it?

THE Oriental shrugged. "My people are gone, wiped out by your gas as yours were wiped out by ours." He retold Anthony's story. "The crew of my own ship mutinied," he concluded. "We fled north, from that last terrible fight, north, ever north, till at the top of the world we found a little space that was not gas-covered There was nothing there, just the ice, and the snow, and the cold. We lived there, twelve of us, all men. There were a few bears and seals. We slew them for food—and we grew a little mad. We were men—all men—do you understand?"

As he said this last, his thin voice rose to a shriek, and his eyes darted to the girl's recumbent form. At length, he went on, the gas began to retreat, and they followed it down. They had searched town after town, city after city, had found food in plenty, and all the trappings of civilization. But there was never a living being. And the fever in their blood drove them on.

That very morning the insane search had reached New York. They had landed on the roof of this very building. "We separated to hunt—and Ka-Jamba was the lucky one. But I—Jung Sin—am still luckier." He crept nearer to Allan, and tapped him on the chest with his weapon. "For look you—while those fools used all their ray-gun charges, even the charge of the big tube on our ship, to kill food, I husbanded mine." He laughed shrilly. "So you see, I have the only ray-gun in the world. It shall make me master of the Earth." Again he laughed wildly.

"Now I'm going to kill you." The black cylinder leveled, and Dane stared at death. Alone, he would almost have welcomed it, but the thought of the girl in the filthy power of this beast seared through him. Jung Sin, the little red worms of madness crawling in his brain, paused for a final taunt.

"Let the thought of the white dove in my arms cons—" Allan's sandaled foot shot out into the man's stomach. In the same movement his hands came down, one snatched at and caught the ray-gun, the other smashed into the yellow face. Jung Sin lifted to the drive of fist and foot, crashed into the wall, fell to its foot. From the crumpled heap rose a shriek, a long piercing wail that ended in a gurgle.

DANE froze, the captured cylinder in his hand, and listened. There were others of the unholy band about. Had they heard? Dim sound came to him. He leaped to the door, flung it open. Faint footfalls, a distant shout, came from

far down the corridor, away from the direction of the stairs. Allan glimpsed dark forms, rushing toward him. He darted back to the girl, swung her, still unconscious, to his shoulder, and was out. The floor was slippery beneath his feet. He reeled as he ran, and the sounds of pursuit gained on him. The heavy burden weighed him down. The dim hallway stretched endlessly before him. From close behind came hoarse, guttural shouts that chilled him.

The pack was not twenty feet away when Allan reached the stair door. He slammed it behind him, heard the latch click. He mounted the narrow, winding steps with the last dregs of energy draining from him, and heard a crash below that told of the collapse of the barrier. But he had reached his plane, had flung the girl into it, and was pulling himself in when the first of the pursuers burst out on the roof.

Allan thrust home the throttle, the helio-vanes whined, and his 'copter leaped skyward. He glimpsed men running across the roof; they vanished behind a leafy arbor. Dane turned the nose of his craft toward Sugar Loaf, amethyst in the haze of distance, but from that green arch a black aircraft zoomed up and shot after him. The American shook his head free of the cobwebs of fatigue, and veered westward. He must not lead the Easterners to Anthony's refuge.

Through the dead air, over a dead world they shot—Allan's white flier and the ebony plane with the bloody emblem of the seven-pointed star emblazoned on its nose. Allan wheeled again as the pursuers reached his level on a long, climbing slant.

But they continued rising! They were five hundred, a thousand feet above him. Then they leveled out, and dived down. Their strategy flashed on him—they were planning to shepherd Dane down, to force him to land where they would have him at their mercy. And their craft was the faster!

THE black ship was right on his tail; Allan flicked his controls and his 'copter slid sidewise on one wing. The other plane banked in a tight arc and sped for him; Dane countered with a lightning loop that brought him behind his enemy. His gray eyes were steel-hard, his lips were a straight, thin gash. The other ship was faster, but his, lighter and smaller, was more flexible. He could not get away, but— They flipped up and back in an inside loop; Allan's little craft barrel-rolled from under.

This sort of thing could not last forever. With each maneuver he was losing altitude. Serrated rooftops were already a scant fifteen hundred feet beneath him, gaunt gray fingers that reached up to pluck him from the sky.

Only half Allan's mind was concentrated on the aerial acrobatics. The other half plodded a weary treadmill. In the nullite chamber beneath Sugar Loaf's summit, he thought, were three couples whose knowledge and wisdom had preserved them for the repeopling of the Earth. Their children, and their children's children—starting from such a source what heights might not the new race attain?

On the other hand, the ship that pursued him carried cowards who had failed in mankind's supreme test; men who had lost their manhood, ravening demi-beasts, half mad with loneliness and desire. As long as they remained alive they would be a menace to those others, an unclean band that would forever sully the new world with the old world's evils. Even should Allan himself escape them by some trick of fortune, they must inevitably find the little band of men—

and women. A cold chill ran through Dane as he visioned the result.

He was not afraid to die. And the girl in the cabin behind him—better that she never awake than that she be the sport of Ka-Jamba's kind. A grim resolve formed itself, and he watched for a chance to put it into execution.

It came. At the end of a shifting maneuver the black 'copter was above and behind the white. Dane's fingers played swiftly over the control board. His ship flipped over backward, rolling on its long axis as it somersaulted. It was directly beneath the other. Then the helio-vanes screamed, and the American plane surged straight up!

A RESOUNDING crash split the air. Metal ripped, a fuel tank exploded. A black wing sailed earthward, zigzagging oddly. Dane's craft and the Eastern ship clung in an embrace of death. They started to drop. But, queerly, the black plane fell faster, left the white one behind as its descent gained speed till it splashed against concrete below. The American helicopter was dropping, too, but sluggishly. Something was buoying it up. Allan, momentarily struggling out of the welter of blackness and pain into which the concussion had thrown him, heard a familiar whine. His helio-vanes were still twirling, limply, stutteringly, bent and twisted, but gripping the air sufficiently to brake his crushed plane's fall.

Afterwards, Allan figured it out. The black pilot had slipped sidewise in that last frantic moment. His effort to escape had been futile, but instead of his ship's body, Dane's plane had struck the wing and torn it off. The impact had irreparably damaged the American craft, but the helicopter motor and vanes had somehow continued to function—just enough. The stanch alumino-steelcid fuselage, though bent and disfigured, had fended the full force of the crash from Allan and his passenger.

Just now, however, Allan Dane was doing no figuring. Pain welled behind his eyes, his left arm was limp, and a broken stanchion jammed his feet so they couldn't move. The vane motor stuttered and stopped, the plane floor dropped away from beneath him, then crumpled against something. The jar jolted Allan into a gray land where there was nothing. . . .

SOMEONE was talking. He couldn't make out the words, but the sound was pleasant. It soothed the throb, throb in his head. Gosh, that had been some party last night, celebrating Flight ZLX's first prize in maneuvers! Great bunch, but would they be as good in real war—sure to come soon? Dane's stuff had too much kick; he must have passed out early.

Somebody shaking him.

"Lea' me 'lone; wanna sleep."

"Oh, wake up, please wake up."

Girl's voice. Nice voice. Voice like that should have pretty face. Better not look, though; too bad if she had buck teeth or squint eyes.

"Oh, what will I do? You're not dead? Please, you're not dead?"

"Don't think so. Head hurts too much." Allan opened his eyes. "Wrong again. Mus' be dead. Only angel could look like that. Not in right place, though. Mistake in shipping directions—tags switched or something."

A cold hand lay across his brow, and he felt it quiver. "Don't talk like that. Wake up." There was hysteria in the limpid tones.

Allan's brain mists cleared, and he grinned wryly. "I remember now. You all right?"

"Yes. But who are you? Are you Anthony Starr?"

"No. But Anthony sent me." Allan struggled to rise. He saw twisted wreckage beside him. He gasped. "I seem to be a bit cdaked. But what—what do you know about Anthony?"

The girl fumbled in her garments, brought out a paper. Allan found that he could move his right arm without much pain. He took the yellowed sheet, and read the faded writing.

Dear Naomi:

You are asleep, and we have been standing by your couch, drinking in the dear sight of you. You sleep soundly, tired as you are by the long-promised story we told you on this, your sixteenth birthday, the tale of how the world you know only from our teachings was destroyed, of how we planned with our friends to escape the general fate, of how an accident separated us from them and immured us here alone, of how you were born in this room and why you have lived here all your short life. We told you all that, but there is one thing we did not tell you.

Our food supply has run low, and the gas outside shows no signs of abatement. With careful husbanding we could all three live for another four months, but there is no prospect that we shall be released in so short a time. Alone, you will have sufficient for a year. If we had had some of Carl Thorman's life-suspension serum—but it was his perfection of that which caused the change of plan to a common refuge, and we never thought to stock with it the discarded rooms in our own apartments.

We have talked it over, and have decided that you must have that eight months' extra chance. And so, dear daughter, this must be farewell.

When the gas is gone Anthony will come to seek us, if he still lives. You will know him by the white robe of metal fabric he will wear, with its black girdle. Trust yourself to him; he was our friend. If all the food has been consumed, and he still has not come, open the door. But fate will not be so cruel to you.

We are weary of the long waiting, Naomi. Do not grieve for us. We shall go out into the gas hand in hand, and release will be welcome.

God guard you.

ALLAN was deeply moved by the love and sacrifice so simply worded. He looked at the girl, and had to blink away a mist that bared his sight before he could see her. "I see," he said. "When the year ended and Anthony had not come, you opened the door—"

"And the gas was gone. Then I heard someone moving far down the corridor. I was so happy. Who could it be but Anthony? I called. A hairy, black giant came running bellowing in some strange language. I was terribly frightened; I think I screamed, and tried to shut the door. But he was too quick for me, he was in the room, and his filthy paws reached out for me. I screamed again, dodged away from him. He pursued me. I threw myself backward, tripped, and fell. My head crashed against the floor.

"The next thing I knew I was here, and you were twisted and jammed there in front of me. At first I wanted to run, then I saw your robe. I dragged you out. Then I spied that other pile of wreckage and I thought you too were dead . . ." She covered her face with her hands.

ALLAN turned his head, saw for the first time the crumpled debris of the black ship, a hundred feet away, saw stark forms. "There's nothing to be afraid of now," he said. "It's all over. We'll soon be with your father's friend, with Anthony."

A little smile of reassurance trembled on the girl's lips. "Oh, do you think so?"

Allan nodded.

"Sure thing! Just trust to me, Miss . . .?"

"Call me Naomi."

"I'm Allan." The pilot thrust out his big hand, full fleshed now, and a little white one fluttered into it. An electric thrill rippled at the contact, and the two hands clung. The girl gave a little gasp, and pink flushed her cheeks.

Naomi shivered a little, and Allan realised that a chill breeze was sweeping across the roof-tops and that daylight was almost gone. "Look here, partner, we'd better get started somewhere." He pulled himself to his feet. Pain shot through him and his head still throbbed. "I'd better take a look at that." He gestured to the wreck of the Eastern ship. "You wait here."

When he returned his face was pallid, and there was a sick look in his eyes. The girl asked sharply: "What is it? What's wrong? Tell me, Allan!"

He looked at her grimly, started to say something, thought better of it. Then: "It wasn't a pleasant sight." He shrugged. "Come on, let's see what we can find. We'll have to spend the night here, and start for Sugar Leaf Mountain in the morning."

Once more Allan descended a narrow, spiral staircase into darkness and silence. But this time someone was at his side, and a warmness ran through him at the thought.

THE topmost floor of this building was a residential level. Like the one where he had found Naomi, a green mold covered everything, and pallid fungi, emitting a pale-green phosphorescence, clung to the walls and ceiling of the long corridor. Apparently the dwellers here had rushed out at the first alarm, had died elsewhere. "This is luck," Allan said. "We shall have a comfortable place to sleep, and food is not far away."

"How is that?"

"Why, the stores level is not far below. Most of New York's structures have a number of residential levels at the top, then a floor of retail stores, and below that amusement places, offices, and factories."

"But whatever food there was must be decayed by this time."

"The fresh food, yes. But there was a lot of canned stuff, and that is probably all right." He pushed open a door. In the eery light a well-furnished living room was revealed. "You wait here, and I'll see what I can rustle up."

"But I want to go with you."

Allan was inflexible. "Please do as I say. I have my reasons."

The girl turned away. "Oh, very well," she said flatly, "if you don't want me with you."

"That's a good scout. I'll be back just as quickly as I can. And, by the way, lock the door from the inside, and don't open it till you hear my voice."

The girl looked at him wonderingly. "But—" she began.

"Don't ask me why. Do it." There was a curious note in Allan's voice, one that cut off Naomi's question. The door shut, and Dane heard the bolt shoot home.

He stood in the corridor, listening intently, his face strained. There was no sound save that of Naomi's movements behind the locked door. Allan turned to search for the auxiliary staircase that must

be somewhere near the bank of ascendor doors.

Silence was again around him, almost tangible in its heaviness. His footsteps reverberated through dead halls, the echo curiously muffled by the coating of slime that spread dankly green. Allan found the staircase well, descended cautiously, pausing often to listen. Not even the faint scuttering of vermin rewarded him.

AT last, three stories down, he reached the stores level. Here, in a great open hall, were the numerous alcoved recesses of the shops. Once thronged, and gaudy with the varicolored goods brought by plane and heavy-bellied rocket-freighter from both hemispheres, the vast space was a desert of moldering dust heaps, brooding. There was a faint odor in the stagnant air—of spices, and rustling silks, of rare perfumes, of all the luxury of the Golden Age that Man's folly had ended.

Allan searched the long shelves feverishly, a nervous urge to complete his task and get back to Naomi tingling in his veins. Once he stopped suddenly, his body twisting to the stair landing. He seemed to have heard something, an indefinable thudding, the shadow of a sound. But it did not come again, and he dismissed it as the thumping of his own blood in his ears, audible in that stillness.

At the end of a long aisle, neat rows of cans greeted him, the labels rotted off, the metal rust-streaked, but apparently tight and whole. He found a metal basket, a roll of wire, twisted a handle for the basket and filled it, choosing the cans by their shape. He should have liked to explore further, but the urge to return tugged at him. He went up the stairs three at a time.

There was a dark, oblong break in the long glowing wall of the upper corridor! The door—it was the door of the apartment where he had left Naomi! He leaped down the hall, shouting. The portal hung open, shattered; the rooms were stark, staring empty. Allan reeled out again. There were the marks of footprints, of many footprints, in the green scum of the hall floor, their own among them, that had led the marauders straight to the girl!

Fool that he had been! He had thought she would be safer behind a bolted door! Allan berated himself. He had thought not to worry her. There had been only four bodies in the wreckage of the black plane—but how had the rest gotten here so soon?

There was a humming whine from above. Dane hurtled toward the roof stairs. He burst from the upper landing, fists clenched, face a furious mask. A helicopter was just rising. Allan jumped for it, his fingers caught and clung to the undercarriage. But the down-swing of his body broke his hold, and Dane crashed to the roof.

HE watched the plane, saw it zoom up, turn east, saw it sink and land a half mile away, atop the building where he had found her. In the moonlight he marked the direction of the place, its distance. Then he was descending stairs, innumerable stairs. He could not hope to reach it in time to save Naomi. But—his eyes grew stony—he could avenge her.

Afterwards that nightmare journey through the murdered city was a detailless blur to Allan. He clambered over heaped rubble, forced himself through windrows of piled bones that crumbled to dust at his touch. Vines, and whipping creepers of triumphant vegetation everywhere halted him: he tore them away with bleeding hands and stumbled on. He fell, and scrambled up again, and plodded on the intermi-

nable path till he had reached his goal.

Here, at last, some modicum of reason penetrated into the numbed blankness of his brain. The dark arch of the entrance-way was somehow familiar. Still legible under the verdigris of the bronze plate on the lintel he read, "Transportation Substation—District L2ZX." Now he understood why he had not seen the black flier till it had leaped in pursuit; how it was that Naomi's captors had so quickly found another 'copter. A bread well penetrated the center of this building—its opening must be covered by the luxuriant vines so that he had not noted it—and dropped down to the midsection that was a hangar for local and private planes. His own little Zenith had been stored here on occasion. There must be other helicopters there, and a stock of fuel. A dim plan began to form at the back of his head.

But first he must find where they were, and what had happened to Naomi.

Allan removed his sandals, and began the endless climb. He made no sound on the steps, cushioned as they were with mold, but at each landing he paused for a moment, listening. The cold fire that burned within him left no room for fatigue, for pain.

A murmuring, then a laugh, cut through the deathlike stillness. Allan was nearly to the top. Down the corridor into which he crept, snakelike on his belly, red light flickered from an open door.

DANE moved soundlessly to that door, and, lying flat, pushed his head slowly past the sash till he could see within. By the light of a fire that danced in the center of the unburnable mallite floor, its illumination half revealing their sodden, brutish faces, he saw an unspeakably strange group. A scene from out the dawn of history it was, the haunch-squatted circle, their yellow skins and black glistening in the crimson, shifting glow. He recognized the giant Negro, Ra-Jamba, his head bound with a rag, and Jung Sin. There were five others clustered about those two, and a third, a skew-eyed Oriental, intent on some game they were playing with little sticks that passed from hand to hand.

Before each of the players there was a little pile of fish bones, black with much handling. The Negro's pile, and that of Jung Sin, were about equal, but there were only two or three in front of the third player. And just as Allan caught sight of them, the sticks clicked, and a shrill objurgation burst from that third as the last of his markers were raked in by Jung Sin's taloned hand. The circle hunched closer, there was a ribald, taunting laugh from Ra-Jamba and Jung Sin glanced over his shoulder into a shadowed corner.

"Have patience, my lotus flower," he purred. "Only one is left. Soon the goddess of fortune and love will clear him from my path. By the nine-headed Dragon, I have never seen a game of Li-Fan last so long. But it draws to an end. Then we shall have our joy together, you and I."

In that instant the fire flared. Allan saw an open window in the background, and beneath it a slim white form lying, bound and helpless. Fierce joy leaped in him, and fiercer hate. Naomi was as yet untouched, the game was being played for her as stake. He had come in time to save her!

But how? There were eight of the Easterners in the room. He had his ray-gun, and might cow them with it and free the girl. But as soon as he had gotten her out of the room, they would surge out after the whites. He could fight

for a while, but the end was almost inevitable. And even if by some miracle he and Naomi escaped, they would be tracked to Sugar Loaf.

The sticks were clicking in a continuous rattle as the final bout of the game waxed fast and furious. And as fast and furious was the whirl of Allan's thoughts. He strove to remember the layout of this building. The helicopter hangar was next above this level. Outside the windows of this floor a narrow ledge ran. The nebulous scheme that had entered his dazed brain as he read the bronze plate below took clearer form, shaped itself to meet this new need.

ALLAN crept away to safe distance, leaped to his feet and flitted upward. He was in the empty, echoing space of the hangar level. The fuel tanks bulged huge in the dimness. Here were reels of the feed hose he needed—flexible metal that had withstood the years; here a faucet nozzle, and a long coil of fine wire. Haste driving him, he made the connections. Then he was descending again, dragging behind him a long black snake of hose whose other end was clamped to a vat of oxygen impregnated gasoline.

The rustle of the hose along the hall floor was muffled by the greasy slime. Dane got the nozzle to just outside the door of the room where Naomi lay captive. The rattle of the playing sticks still continued. Jung Sin's voice sounded, in a language that Allan did not understand. But there was no mistaking the triumphant note in the silky, jeering tones. The yellow man was winning, and winning fast.

Dane twisted one end of the wire around the faucet handle. Then he was unwinding the coil as he tried the door of the chamber next to the one where the fire burned, found it open, darted across the room and softly raised the sash. The sill here, like the one beneath which Naomi lay, was a bare two feet above the ground.

He was out on the ledge, sliding along it toward the fire-reddened oblong five feet away. He crammed his body close against the wall, kept his eyes away from the unfenced edge of that eighteen-inch shelf. Beyond, an abyss waited, twelve thousand feet of nothingness down which a single misstep, an instant's vertigo, would send him hurtling. Suddenly the rattle of sticks stopped, and he heard the black's long howl of disappointed rage. The game was over!

Allan reached the window, glimpsed a leering semicircle of animal faces, saw Jung Sin coming toward him. Then he had swung in.

"Back, Jung Sin! Back!" Allan was straddled over Naomi's form, the ray-gun thrust out before his tense threat, his face livid, his eyes blazing. "Get back, or I ray you!"

CONSTERNATION, awe, flashed into the brutal faces of the Easterners. Jung Sin reeled back, his saffron hands rising. Allan's weapon swept slowly along the line of staring men. "If one of you moves I flash."

He bent to the girl, keeping his eyes on the Easterners, and his weapon steady. He had hung the wire coil over his shoulder, leaving his left hand free to fumble for and untie the cords around Naomi's wrists. He got them loose.

"Can you get your feet free, Naomi?"

"Yes. I can manage it." Her voice was steady, but there was a great thankfulness vibrant in it.

"Then do it and get out on the ledge. Quick." He straightened, and the blaze of his eyes held the yellow men, and the black, motionless.

Naomi, at the window behind

him, gasped. "I know it looks tough," he encouraged her, "but you can make it. Don't look down. Go to the left. *And keep clear of that wire.*"

"I'm all right, Allan. But you—"

"Never mind about me. Go ahead."

Jung Sin jerked forward, driven by the madness that twisted his face into gargoyle hideousness. But Allan's ray-gun stabbed at him, and he halted.

"I'm out, Allan."

Dane's foot felt back of him for the sill, found it. He lifted, facing his enemies inexorably, caught the lintel with his left hand, and was crouching outside. A sidewise flick of his eyes showed Naomi just reaching the other window.

He pulled at the wire till it was gently taut. A moment's compunction rose in him at what he was about to do. Then the black roll of the Easterners' crimes rushed into his mind. Naomi's safety, his own, and that of the little colony that had endured so much to preserve humanity, cried out for their extinction. Allan jerked the metal thread, and the faucet nozzle in the corridor opened.

A black stream gushed forward, reached the fire, and the room was a roaring furnace. Allan saw the forms of his enemies silhouetted against the blaze for a fleeting instant, then they were flaming statues. One only, Jung Sin, nearer than the rest, leaped for the window and escaped the first gush of flame. Allan pressed the trigger of his ray-gun. But no blue flash answered that pressure. The weapon's charge had leaked out, was gone!

ALLAN tore himself loose from yellow hands that clutched at him, his fist crashed into Jung Sin's fear twisted visage, and the crazed Oriental fell back into the roaring blaze.

But Allan himself was thrust backward by that blow, was swaying on the very edge of the chasm. His hand went out for a saving hold on the window sash; flame licked at it. He was toppling, against the strain of his body muscles to resist the inevitable fall, and death reached up from depths for him. Then an arm was around him, was drawing him back to life. Naomi had darted back, defying the terror of that height, the surge of heat. She had reached him just in time—a split-second later and his weight would have been too much for her puny strength. But in this instant, the merest touch was enough to save him. They crept along the ledge and climbed wearily in.

There was another plane in the hangar, and presently Allan had it rising through the well into clean, free air. He turned to the girl in the seat beside him and pointed at the scene they were leaving.

"Look," he said.

The city was in darkness beneath them, save for the one staring rectangle that marked a pyre. But dawn shimmered opalescent in the east.

A soft white hand crept into Allan's. There was a long moment of silence. Then Allan said, softly: "A new day, and a new world for their children."

A sleepy, tired voice sighed: "For their children and ours, Allan."

Have You Tried

STRANGE TALES?

She was motioning for him to follow

Two Thousand Miles Below

Part Three of a Four-Part Novel

By Charles Willard Diffin

WHAT HAS GONE BEFORE

TONAH BASIN, in the great American Desert, was not always a place of blistering heat. Scarred mountains and sheer valley walls tell the story of ancient glaciers. But no page of history holds the record of the savage tribes who fled or who sought refuge in deep, hidden caves to escape the cold.

Dean Rawson,

> The Voice of the Mountain heralds Rawson's messianic coming to the White Ones in their hour of need.

young mining engineer, sinking his drills in the floor of Tonah Basin, was not thinking of hidden people. Even the gold that was clogged upon a drill did not interest him. Rawson was searching for power—heat—energy for the whole Southwest. But when a bailer was pulled up red and dripping with blood....

Then came mystery and attack by unseen foes. And Rawson, searching for the enemy who had killed his men and wrecked his drilling rigs with flashes of green flame, ascended to the crater of one of the adjacent volcanic peaks.

Smithy, his assistant, was with him, but at a distance. Unable to help, he saw the sandy floor of the choked crater change to an open throat, saw red man-things appear with flame-throwers. And Rawson, as the rock on which he stood was cut from under him by the green blast, pitched into the abyss.

"Mole-men," Smithy called them. He emptied his gun toward the retreating figures and fled. That night Rawson's camp was destroyed. A settlement miles away vanished in flames. The mole-men had found their way to the outer world. Smithy, pulling up the bailer from the shaft ten miles in the earth, found Rawson's ring jammed into the shackle. Rawson had not died.

He appealed to the sheriff unsuccessfully; then to the Governor. Smithy's father, head of the opposing power combine, got the Governor to listen to the wild tale.

Flying over Tonah Basin with Colonel Culver, Smithy saw the sheriff's posse wiped out. A heat ray flicked their plane and injured Culver, though Smithy rained small explosive shells in retaliation upon the enemy.

Back in the Governor's office, Smithy made his report. And, even as he spoke, the radio newscaster sounded a nationwide warning. At a number of points, the enemy had worked havoc.

Only Rawson, held for torture by the half-human reds, knew the enemy's power. He saw the giant yellow workers in thousands, and red warriors, malevolent as devils. He saw their system of underground workings, their fiery world within a world.

Struggling with one of the priests in their temple of fire, his pistol saved him. The priest vanished down the white-hot throat. Then, trying to escape, he saw a vision of a fair-skinned girl who disappeared as the red warriors seized him.

Rawson lay close to death while the red mole-men restored his burned body to health. Among the visions that came to him was one of the girl. Other white forms that seemed to Rawson like spectres were with her. Mingled with strange words he seemed to hear: "Gevarro—the Lake of Fire. . . . Phee-e-al has condemned him. . . ."

Again conscious, his burns healed, he was taken before Phee-e-al, the ruler, and his priests. He saw the charred body of the sheriff whom he had known in the outside world. Realizing what was in store for him, Rawson attacked the ruler, hoping to die quickly. He was overpowered, knocked senseless and taken toward the center of the earth.

The Lake of Fire was before him when he awoke. He was helpless; the grasp of the priests could not be shaken off. Blasting waves of heat strangled him. He was still struggling when he knew that his captors had vanished in sudden whirling clouds of white. Intense cold wrapped about him. An explosion drove the clouds into whirlwinds.

He sensed other bodies, close, other hands that tore him free. A narrow opening was in the wall. Ahead, the girl of his former

dreams was guiding him. Others helped him down a steep and narrow way.

The White Ones! They had come to him in a vision. Was this, too, a dream?

CHAPTER XVI

The Metal Shell

DEAN RAWSON had passed through a nerve-racking experience. It was not a question of courage—Rawson had plenty of that—but there are times when a man's nervous system is shocked almost to insensibility by sheer horror. Not at once did he realize what was happening.

Perhaps it was the sound of pursuit that jarred him out of the fog clouding all his thoughts and perceptions. It was like the sound of fighting animals—cat-beasts—whose snarls had risen to screaming, squalling shrieks of rage. It was sheer beastliness, the din that echoed through that narrow passage.

Ahead of him the girl was running. She held a light in her hand. Soft wrappings of cloth hung loosely from her waist; like her golden hair, it was flung backward in the strong draft of air against which they were struggling. She was outlined clearly before the red, rock-like masses where her light was falling; she was running swiftly, gracefully, like a wild, woodland nymph.

Two men, their milk-white bodies naked but for the thick folds of their loin cloths, were beside Rawson, helping him along. Two others followed. And, by their haste and their odd whispered words of alarm, he knew that pursuit had not been expected: they must have thought to get away unobserved.

Rawson felt his strength returning. He shook himself free from those who tried to aid him. He was amazed at how easily he ran: his weight was a mere nothing; his efforts were expended in driving his body against the blast of wind. The air seemed dense, thick; he had almost the feeling of forcing himself through water.

Ahead of him the girl darted abruptly through a narrow crack in the wall. Rawson followed—and then began a wild race through a network of connecting passages, a vast labyrinth of caves, more like fractures in this strange red substance which Rawson could think of only as rock, for lack of a more accurate name, until at last there was no sound except that of their own hurrying feet.

THEY stopped and stood panting in one of the wider passages. He heard nothing but the endless rush of the wind. For the first time Rawson became aware of his own almost naked condition.

The mole-men had prepared him for the sacrifice. They had decked him with a loin cloth of woven gold. It felt cold to the touch, and Rawson did not doubt its being made of fine threads of the precious metal. About his neck hung a gold chain with a heavy object suspended; he tore it off, and found again a representation of a golden sun. The copper priests had arrayed him to meet their fire-god, and again Rawson wondered at the emblem they employed.

"What in the name of the starlit heavens," he demanded silently of himself, "could this buried race know of the sun?"

The others were watching him. In the glow of that strange light held by the girl he saw them smiling. They were congratulating one another with odd, soft-syllabled words. And Rawson, ignorant of their tongue, was mute, when his whole soul cried out to thank them.

He gripped the hands of the men. They were as tall as himself, their gaze level with his own. Their faces were human, friendly; their eyes sparkled and smiled into his. Then he turned to the girl.

She had seen the method of greeting this stranger employed. She extended her hand—a white hand, slim, soft, cool. And Rawson, choking with emotion, knowing that here was the one who had first seen him and who had returned to save him, a stranger, bent low above that hand, held in his own so rough and burned, and pressed his lips to the slender fingers in a quick caress.

When he raised his head she was looking at him oddly; her eyes were deep, serious and unsmiling. He wondered if, blunderingly, he had offended her. He could not know; he did not know their customs.

Again the slim girlish figure turned; her jeweled breast-plates flashed as she led the others on where always the way led upward and the wind pressed against them unceasingly.

THE White Ones wore sandals that seemed woven of glass. Rawson's bare feet were bruised and sore, for those narrower clefts had been paved only with broken fragments of the red walls. He moved less easily now. The heavy, beating air tired him; the lightness of his body made it all the more difficult to fight the steady wind. Still he followed the white figure of the girl where her light was flashing on endless walls of red.

In his ears a new sound was registering. Above the rush of the air, that now was soft and warm, a new note had risen to a hollow, unremitting roar. He knew that for some time he had been hearing it faintly. It grew louder, one long, steady, unchanging note, as they advanced. It was a deafening reverberation that seemed shaking the whole earth when they came at last to an open room.

It beat upon him thunderously. As deep as the deepest tone of a mighty organ, like a thousand gigantic organs welded in one, it roared and shook him through and through with its single note.

Exhausted by his wild flight, surrounded by this maelstrom of sound, he sank to the floor and let his labering lungs have their way. But his eyes were searching the big room.

THE great cave was too regularly formed to have had a natural origin. The light that the girl had carried gave only feeble illumination in so great a space that had so evidently been hollowed out of the solid red matter.

The light flashed here and there as the girl and her companions moved away. They were circling the room. Rawson saw the irregular outlines of entrances to many dark passages like the one through which they had come. The red rock-mass seemingly had been riven and torn, and apparently in front of each opening the white figures fought against the rush of outgoing air. Rawson felt the same current sweeping and whirling gustily about him.

Now his companions were across the room, and between him and them in the center of the floor he saw the mouth of a black well, a pit some twenty or more feet across. Directly above, where the red rock stuff formed a domed ceiling, he found a counterpart of the pit below—another great bore or open shaft, roughly circular. Apparently it went straight on up and was a continuation of that lower pit!

"This room was cut out," Rawson was thinking, "by the white people-

or the molemen—Lord knows who, or when, or why. Cut out around this big shaft. . . ."

His thoughts trailed off. Even thinking seemed impossible under the battering of the roaring noise that pounded about him. Then another thought pierced through the bedlam. He had found the source of the uproar.

THAT upper shaft, the hole that went on up, must be plugged. There was no outlet that way, and this air that drove endlessly upward from the room must be coming from the lower shaft. It was striking up into that upper cavity.

An organ pipe, truly. But whence came the unending blast of air to keep that gigantic instrument in operation? Rawson dropped to his knees and crept slowly across the floor toward the pit. He must test his theory—see if that was where the air was driving in.

Just short of the brink he stopped. The girl had called—a cry of alarm. She was running swiftly toward him, circling the pit. And Rawson, as she tugged at him, trying to draw him back, knew that she had mistaken his motive. She had thought he was going to cast himself down.

He did not need to go farther. He was close to the edge. And now, even above that roaring sound he heard the rush of the column of air. He seated himself on the stone floor and smiled up at the girl reassuringly. Her eyes that had been dark with fear changed swiftly to a look so sweetly, beautifully tender that Dean Rawson found himself thrilled and shaken by an emotion that set his nerves to quivering even more than did the sonorous vibration from above.

Her companions had joined her. Dean saw her eyes regarding them steadily. Then, as if reaching some sudden final conclusion in her own mind, she dropped swiftly to her knees beside him, raised one of his hands in hers and pressed her soft lips against it.

And Dean, even had he known their language, could not in that moment have spoken. There had been something in the look of her eyes and the soft touch of her lips that of themselves went far beyond words.

"You darling," he was whispering softly to himself as the girl sprang to her feet and walked swiftly away, the others following.

"An angel, no less—down in this damned place!"

HE wondered, as he watched the flickering light far across the room, what destination they could be bound for. Surely no one so radiantly beautiful could inhabit a world of endless dungeons like that where the mole-men lived. But if not that, then what? Where would their next journey take them? And in what direction would they go?

Again Rawson's thoughts were submerged beneath his own weariness. This air that beat about him had seemed cool after the terrific heat that drove in off the Lake of Fire. Now he realized that the air itself was hot. His one spurt of strength and energy had been expended.

He watched the men disappear into one of the passages, but he roused himself when they returned. They were clinging to a strange device, a metal cylinder that floated in air above their heads like a dirigible on end. It was about eight feet in diameter and some fourteen feet in height; both upper and lower ends were rounded. A cage of parallel bars enclosed it from end to end; like springs of steel they extended from top to bottom where they curved in and were attached to the rounded ends.

RAWSON sat up quickly and stared in startled amazement at the thing glinting like polished aluminum in the light. And his engineer's mind responded as much to that smooth finish and the evident workmanship that had entered into the making of this thing as it did to the object itself.

The girl placed her light on the floor. She, too, reached up and gripped a bar of the protecting cage to which the others were holding. With her added weight and strength they drew it down almost to the floor. Rawson knew by their efforts that they were dealing with something actually buoyant, a metal balloon. One of the men, still putting his weight on the bars, reached in and opened a door in the smooth shell. He stepped inside, and a moment later the big shell dropped to the floor and, still vertical, stood on the lower rounded end of the protecting cage, rocking gently as the hot whirling wind hit it.

They were communicating among themselves by signs. Rawson saw them motioning. Speech was useless in that roaring, pandemonium-filled room

She was motioning for him to follow. One of the men circled that central pit, came beside Rawson and helped him to his feet, steadying him as they crossed the room. The girl had entered the big metal shell. Dean saw the glow of her torch shining through the open doorway and through two other windows of crystal glass.

The big room had grown dimmer. The high ceiling was lost in murky shadows. All the room was dark save where that light struck upon walls and floor to make them glow blood-red. The waiting lighted shell seemed a haven of refuge. To get inside, close the door, lock out some of this unendurable, battering sound—it was all Rawson asked, all he could think.

The door closed. He was within the shell, standing on a smooth metal floor. The others were beside him. Dully he wondered what wild adventure was ahead.

HE had expected—he hardly knew what. But there should have been machinery of some sort. If this weird balloon thing was actually to carry them, there must be some mechanism, some propelling power. And instead he saw nothing but the shining walls of the circular room and at the exact center, reaching from floor to ceiling, a six-inch metal post that thickened to a boxlike form on a level with his eyes. There was a plate on the side of that box, a cover, and clamps that held it in place, and on an adjoining side two little levers, one near the top of the box, the other near the bottom.

His one all-inclusive glance showed him bull's-eye windows in the ceiling. There were more of them in the floor. One curved bar, circling the room, was mounted on brackets against the wall. They were telling him by signs that he was to put his hands on it and hang on. One of the men was beside that central post. He too gripped at a projecting hand-hold. His other hand was on the lower lever.

Rawson knew his disappointment was unreasonable, but his weary mind was tired of mysteries. Some understandable bit of machinery would have been reassuring. And then in his next thought he asked himself what difference did it make. If this childish balloon thing were really capable of carrying them somewhere, what of it? It could only mean more of this hideous inner world that grew more unbearably fantastic with each new experience.

His life had been saved. True, but for what end? The girl's eyes

were upon him, reading the expression on his face. She smiled encouragingly. Then Rawson's hands tightened upon the metal bar. The man who stood by the central post had moved one lever the merest trifle. Rawson felt the floor lifting beneath him. Then the shell, like a bubble of metal, pitched and tossed as the powerful air currents caught it.

HIS own lightness saved him from injury. He gripped the bar and held himself free of the wall. The round top of their strange craft grated against the domed roof. Then again the ship steadied and seemed motionless, and Rawson knew they had slipped up into the still air of that upper shaft.

For one wild instant, filled with impossible hope, Rawson saw this as a means of ascent to his own world. Then reason tore those wild hopes to shreds.

"It's closed up above," he thought. "It must be. That's why it sounded that way. That's why the air drove off through those side passages."

The next instant held no time for thought. Rawson's whole attention was concentrated upon the bar to which he clung. For, quicker than thought, the metal shell, the little cylindrical world in which he and these others were, fell swiftly beneath them.

His body twisted in mid-air. He knew the others were being thrown in the same manner. Then, what an instant before had been the ceiling was now a floor beneath his feet, pressing up against him and giving him weight—and by the whistling rush of the air that tore past their shell he knew they had fallen with marvelous swiftness straight down through the throat of that lower shaft.

And now what had been down was up. The ceiling of this strange room was now their floor, but Rawson was not deceived. "Acceleration," he said. "It's crowding us. The shell tends to fall faster than we do. It's like an elevator traveling downward at a swifter rate than a free falling body."

HE had glimpsed the glassy side of that well into which he knew they had been flung. He knew that the shrieks that filled the room time and again were caused by the touching of their shell's guiding and protecting bars against one glassy wall. Those sounds came always from the same side and Rawson found momentary satisfaction in his own understanding of the phenomenon.

"We're falling free," he argued within his own mind, "falling toward the center of the earth. And a falling body wouldn't follow a vertical course. It would tend to hug against one wall." And by that he knew something of their speed. The necessity for it was apparent a moment later.

Above his head the bull's-eye pointing forward in the direction of their flight were faintly red. Swiftly they changed to crimson. Rawson was standing beside a window in the wall of their craft. That, too, grew quickly to an area of dazzling brightness. Slowly the heat struck in. The air in the little room was stifling. He saw the girl turn her head and give a sharp order.

The man by the central post responded with another slight movement of the lever. Beneath Rawson's feet the floor pressed upward in a surge of speed that bent his knees and bore him downward. Under his hands the rod to which he clung was hot. The shining walls were dimly glowing. They were being hurled through the very heart of hell. . . .

AND then it was past. The crimson horror beyond those windows grew dull and then black. In the blunt nose of their craft a tiny crevice must have opened. The one who drove that projectile in its shrieking flight had touched another control that Rawson had not before seen. And with a piercing shriek a thin jet of cold air drove down into the hot room.

No wine could have been one-half so potent. That thin jet filled the room with buffeting whirlwinds that grew quickly cold.

Then their speed was checked. Abruptly Rawson was weightless, his body hanging in air, moved only as he moved his hand upon the bar. Only a few feet away was the body of the girl floating weightless like himself. The others were shouting loud words of satisfaction, but her face was turned toward Rawson, her eyes were smiling into his; while, outside the little shell that fell in meteor flight, were only shrieking winds and the blackness into which they plunged.

CHAPTER XVII

Gor

THROUGH an ordinary experience, Dean Rawson, like any other man, would have kept unconscious measurement of the passing time. An hour, no matter how crowded, would still have been an hour that his mind could measure and grasp. But now he had no least idea of the hours or minutes that had marked their flight. Each lagging second was an age in passing. Even the flashing thoughts that drove swiftly through his mind seemed slow and laborious. Painstakingly he marshaled his few facts.

"They know what they're about, that's one thing dead sure. They're onto their job, and they've got something here that beats anything we've ever had." He mentally nailed that one fact down and passed on to the next. "And that's the bow end of our ship, up there." He looked above him at a dented place in the ceiling, the ceiling that had been the floor of the room when first he stepped into it. "There isn't any up or down any more. I've been flipped back and forth every time we slowed down or accelerated until I don't know where I'm at, but I saw that dented plate in the floor when I got in and we started falling in that direction. But whether we're falling toward the center of the earth still or whether we passed the center back there at that hot spot and now this crazy, senseless shell is flying on and up, perhaps these people know —I don't!"

Then fact No. 3. "They live somewhere inside here. They're taking me there, of course. It must mean there's a race of them—and they don't like the mole-men. They know the way back, too, and if they'll help me. . . . Perhaps the fighting's not over yet!"

Through more endless, age-long seconds there passed through Rawson's mind entrancing visions. An army of men like these White Ones, himself at their head. They were armed with strange weapons; they were invading the mole-men's world. . . .

The girl was reaching toward him. She laid one hand upon his, then pointed overhead.

RAWSON looked quickly above. The glowing bull's-eyes startled him, then he knew it was white light he was seeing, not the red threat of glowing rock. Their speed had been steadily cut down as the air pressure lessened. "They're decompressing," he thought. "They're working slowly into the lesser pressure."

The passing air no longer shrieked insanely. Above its soft

rushing sound he heard the girl's voice; it was clear, vibrant with happiness. Her hand closed convulsively over his; her eyes beneath their long lashes smiled unspoken words of welcome, of comradeship, and of something more.

Within their room her light, which at close range seemed only a slender bar of metal with a brilliantly glowing end, had been clamped in a bracket against the wall. The illumination had seemed brilliant, now suddenly it was pale and dim.

Through the bull's-eyes above, a brighter light was shining, clear and golden, like the light of the sun on a brilliant and cloudless day. And to Rawson, who felt that he had spent a lifetime in the gloomy dungeons of that inner world, that flooding brilliance was more than mere light. It was the promise of release, the very essence of hope. His eyes clung to those little round windows; then the larger glass beside him blazed forth with the bright sunlight of an open world that was unbearable to one who had lived so long in darkness.

He held tightly to that slim hand that remained so confidingly within his own.

"It isn't true," Rawson was telling himself frantically. "It can't be true. It must be a delusion, another dream."

He gripped the girl's hand in what must have been a painful clasp. He told himself that she at least was real. Her lovely face was before him when at last he could bear to open his eyes.

ABOUT him were the others. The cylinder rested firmly upon a surface of pale-rose quartz. Inside the shell he saw the floor where he had stood, and with that he added one more fact to the few he had gotten together. There was no dent in the floor. The shell's position was reversed. What had been up was now down. Rawson knew he was standing firmly, with what seemed his normal earth weight, upon a smooth surface of rock; he knew that he was standing head down as compared with his position at the beginning of their flight—as compared, too, with the way he had stood in the mole-men's world and in his own world up above.

"We passed the center of the world." The words were singing in his brain. And then reason shot in a quick denial. "You're as heavy as you were on earth," he told himself. "You'd have to go through and on to the other side, the opposite surface of the world, before your weight would come back like that!"

"What could it mean?" he was demanding as his eyes came back from the machine and swept around over a gorgeous, glittering panorama of crystal mountains, rose and white. Fields of strange plants, vividly green; a whole world that rioted madly in a luxury of color. Before him the girl stood smiling. Every line of her quivering figure spoke eloquently of her joy in seeing this world through Rawson's eyes.

A MAN was approaching, a man like the others, yet whose oval face strangely resembled that of the girl. She led Rawson toward him, then Rawson, stopping, jerked backward in uncontrollable amazement, for the tall man drawing near had spoken. His lips were open, moving, and from them came sounds which to Rawson were absolutely unbelievable:

"Stranger," said the newcomer, "in the name of the Holy Mountain, and in the Mountain's language and words, I bid you welcome."

And Rawson, too stunned for co-

herent thought, could only stammer in what was half a shout: "But you're speaking my language. You're talking the way we talk on earth. Am I crazy? Stark, raving crazy?"

But even the sound of the man's voice could not have prepared him for what followed. There was amazement written on the face of the man. And the girl who stood beside him—her eyes that had been smiling were wide and staring in utter fear. Then she and the man and the other white figures nearby dropped suddenly to kneel humbly before him. Their faces were hidden from him, covered by their hands as they bent their heads low. He heard the man's voice:

"He speaks with the tongue of the Mountain! He comes from the Land of the Sun, from Lah-o-tah, at the top of the world! And I, Gor, am permitted to hear his voice!"

CHAPTER XVIII

The Dance of Death

THROUGH an airplane's thick windows of shatter-proof glass, so tough and resilient that a machine-gun bullet would only make a temporary dent, the mid-day sun flashed brightly as the big ship rolled. Along each side of the small room, high up under the curve of the cabin roof, windows were ranged. Others like them were in the floor. And, above, the same glass made a transparent dome from which an observer could see on all sides.

Outside was the thunderous roar of ten giant motors, but inside the cabin—the fire-control room of a dreadnought of the air—that blast of sound became more a reverberation and a trembling than actual noise.

Certainly the sound of motors and of slashing propellers, as the battle plane soared up into the sky, did not prevent free conversation among the three men in the room. Yet there was neither laughter nor idle talk.

At a built-in desk, before a battery of instruments, sat Farrell, the captain of the ship. Farther aft, in solidly anchored chairs, Colonel Culver and Smithy were seated. Occasionally the captain spoke into a transmitter, cutting in by phone on different stations about the ship.

"Check up on that right-wing gun, Sergeant—number two of the top wing-battery. Recoil mechanism is reported stiff. . . . Tell Chicago, Lieutenant, we will want one thousand gallons in the air—gas only—no oil needed. . . . Gun room? Have the gun crews get some sleep. They'll have to stand by later on. . . ."

Colonel Culver spoke musingly. "Guerilla warfare, the hardest kind to meet."

SMITHY nodded absentedly. He rose and stared from one of the side windows that was just level with his eyes. He could see nothing but the broad expanse of wing, a sheet of smooth gray metal. Along its leading edge was a row of shimmering disks where great propellers whirled. From the top of the wing a two-inch Rickert recoilless thrust forth its snout; it rose in air till the whole weapon was visible, then settled again and buried itself inside the wing.

They were testing a gun. Smithy knew that inside that wing section were other guns, and men, and smoothly running motors. The whole ship was only a giant flying wing of which their own central section was merely a thickening.

He looked down through a bull's-eye in the floor. The city they had just left was beneath them. Washington, the nation's capital; the golden dome of the Capitol Build-

ing was slipping swiftly astern. Only then did he make a belated reply to Culver's statement.

"Well," he said shortly, "they'll have to meet it their own way. We told them all we knew. And a lot of good that did—not!"

"Five days!" said Culver. "It seems more like five years since the devils first came out. Nobody knows where they will hit next. But they're working north—and there's no trouble in telling where they've been."

Smithy's voice was hot in reply, hot with the intense anger of a young, aggressive man when confronted by the ponderous motion of a big organization getting slowly under way.

"If only we'd gone down underground," he exclaimed; "carried the fight to them! They live there—there must be a whole world underground. We could have carried in power lines, lighting the place as we went along. We could have fought 'em with gas. We'd have paid for it, sure we would, but we'd have given them enough hell to think of down below so they wouldn't raise so much of it up above.

"But no! We had to fight according to the textbooks. And those red devils don't fight that way; they never learned the rules."

"GUERILLA warfare," Colonel Culver repeated. "There are certain difficulties about fighting enemies you can't see."

"They're clever," Smithy admitted. "We taught them their lesson down there in the desert—they've never been seen in daylight since. Out at night—and their invisible heat-rays setting fire to a city a mile away, then mopping up with their green flame-throwers if anyone's left. They pick our planes out of the sky even when they're flying without lights. Darkness means nothing to them! It was murder to send troops in against them, troops wiped out to a man! Artillery—that's no good either when we don't know how many of the devils there are, or where they are. There's no profit in shelling the place when the brutes have gone back underground."

Colonel Culver shot a warning glance from Smithy to the seated officer. "About a hundred square miles of the finest fruit country on earth laid waste," he admitted gravely; then sought to turn Smithy from his rebellious mood:

"What's underground, I wonder? Must be a world of caves. Or perhaps these mole-men can follow up a mere crack or a fault line and open it out with their flame-throwers to make a tunnel they can go through."

The plane's captain had caught Culver's glance. "Speak your piece," he said pleasantly. "Don't stop on my account. There's a lot to what Mr. Smith says—but you don't know all that's going on."

He had been half turned. Now he swung about in his little swivel chair, whose base was riveted solidly to the floor and whose safety belt ends dangled as he turned.

"My orders are to deliver you two gentlemen at San Francisco. But there's a show scheduled for to-night down south of there—two hundred planes, big and little, scouts, cruisers, battle planes. They're going to swarm in over when the enemy makes his first crack. There's a devil of a storm in the mountains along the route we would usually take. I'm afraid I'll have to swing off south." He was grinning openly as he turned back to his desk.

Colonel Culver smiled back. "Attaboy!" he said.

But Smithy's forehead was still wrinkled in scowling lines as he walked forward to an adjoining

room. "Underground," he was thinking. "We've got to carry the fight to them; got to lick 'em so they'll stay licked. But Rawson—good old Dean—we're too late to help him. And the lives of all the devils left in hell can't pay for that."

SMITHY had been dozing. The shrill whistle of a high-pitched siren brought him fully awake in an instant. Culver, too, sprang alertly to his feet. Both men knew the signal was the call to quarters.

They had spread blankets on the floor of the fire-control room. Culver immediately folded his into a compact bundle, and Smithy followed suit, as he said: "That's right: we don't want any feather beds flying around here in case of a mix-up."

Even Culver's simple act of stowing the blankets back in their little compartment thrilled him with what it portended. His nerves were suddenly aquiver with anticipation. A real fight! A determined effort! No telling what these big dreadnaughts could do. Two hundred, big and little, Captain Farrell had said. If they could catch the enemy out in the open, show him up in a blaze of enormous flares. . . .

Captain Farrell was calling them. A section of the floor had been raised up mysteriously to form a platform beneath the shallow dome of the conning tower. Farrell was there, headphones clamped to his ears, one hand on the little switchboard at the base of the glass dome that kept him in touch with every station on the ship. Beside him was the fire-control officer similarly equipped, though his headphone was connected only with the gun crews.

"THE enemy's out!" said Captain Farrell. "And not just where they were expected—they're raising fourteen kinds of hell. The ships have been ordered in. I'm hooked up with the radio room now. They're less than a hundred miles ahead. Of course we won't mix in on it, but I thought it best to have my men standing by."

He pressed a little lever on his switchboard and spoke into the mouthpiece of his head-set. "Pilot room—four passengers, Colonel Culver and Mr. Smith, are coming forward. Let them see whatever they can of the show."

He gave the two a quick smile and a nod and waved them forward with the binoculars in his free hand. "It will be 'lights out' after you get there. We'll be flying dark except for wing and tail lights up on top. The enemy's movements are uncertain; perhaps he can see us anyway, but we won't advertise ourselves to him."

The ship's bow was a blunt, rounded nose of glass, cut by cross bars of aluminum alloy. That deeper central portion of the big flying wing was carried ten feet forward; it was but one of many details that Smithy had looked at with interest when he had seen the ship waiting for them on the field.

THE pilot room was dark when they entered. Only the glow from the instrument panel showed the two men who were seated behind the wheel controls. One of them turned and nodded a welcome.

"Can't offer you gentlemen seats," he said, "but if you'll stand right here behind us you can see the whole works." He did not wait for a reply, but turned back toward the black night ahead.

Smithy glanced past him at the lighted instruments and found the altimeter. Twelve thousand—yes, there was nasty country hereabouts. Then he, too, stared out into the dark at the sky sprinkled with stars, at the vague blur of an unlighted world far below, and off at

either side and behind them the quivering lines of cold light where starlight was reflected dimly from the spinning propellers.

Other wing lights winked out as he watched, and he knew that from that moment on, they were invisible from below—invisible to human eyes at least—that they were sweeping on through the darkness like some gargantuan night bird pursuing its prey.

"Flares ahead, sir," one of the pilots had spoken into the mouthpiece of his telephone, spoken lightly, reporting back to Captain Farrell. The words whipped Smithy's head about, and he, too, saw on a distant horizon, the beginning of a white glare.

They were fighting there—two hundred planes roaring downward, one formation following another. In his mind he was seeing it so plainly.

The white blaze of light dead ahead grew broader. It had not been as far distant as he had first thought, and the scene that he had pictured came swiftly to reality.

THEIR own ship was still at the twelve-thousand-foot level. Ahead, and five thousand feet below, tiny lights, red and white and green, lights whose swift motion made their hundreds seem like thousands instead, were weaving intricate patterns in the night. The flying lights of the fighting planes were on for the planes' own protection; and, too, no further concealment was possible in the glare that shone upward from below.

Settling downward were balls of blinding fire, flares dropped by the squadron of scout planes that had torn through in advance. They lighted brilliantly a valley which, a few hours before, had been one of many like it—square fields, dark green with the foliage of fruit trees, straight lines of crossing roads, houses, and off in the distance a little city.

And now the valley was an inferno of spouting flame. That city was a vast, roaring furnace under smoke clouds of mingled blood-red and black. The valley floor was a place of desolation, of drifting smoke and of flashing shell-bursts as the fleet swept in above.

The myriad lights of the planes had drawn into a circle, a great whirlpool of lines that revolved above a mile-wide section of that valley.

Beside Smithy a wheel control was moving. He clung to the pilot's seat as their own plane banked and nosed downward. And now he shouted aloud to Culver:

"The mole-men! There they are! Thousands of them!"

HE was pointing between the two pilots as their own plane swept down. He could see them plainly now, clotted masses of dark figures surging frenziedly to and fro. For an instant he saw them—then that part of the world where they had been was a seething inferno of bursting bombs and shells.

Beside him Colonel Culver spoke quietly: "Caught them cold! That's handing it to them."

Their own plane had leveled off. With motors throttled they were drifting slowly past, only a thousand feet higher than the circling planes just off at one side. Culver's quiet tones rose to a hoarse shout: "The ships! My God, they're falling!"

His wild cry ended in a gasp. Beside him Smithy, in breathless horror, like Culver, was staring at that whirlpool of tiny lights that had gone suddenly from smooth circular motion into frenzied confusion, or vanished in the yellow glare of exploding gas tanks. The light of their own white flares picked them out in ghastly clarity as they fell.

Straight, vertical lines of yellow were burning planes. Again they made horrible zigzag darts and flashed down into view torn and helpless, while others, tens and scores of others with crumpled wings, joined the mad dance of death.

Smithy knew that he could never tear his eyes away from the sight. Yet within him something was clamoring for his attention. "They didn't do it from below!" that something was shouting. "Not down in that hell. There are more of them somewhere." Then somehow, he forced his eyes to stare ahead and outside of that circle of fearful fascination and he knew that for an instant he was seeing a single stab of green flame.

ONE single light on the darkness of a little knoll that stood close beside this place of white flame and destruction. One light—and in the valley there had flashed a million brighter. It had shone but an instant, but, to Smithy, watching, it was the same he had seen when their own camp was attacked. And now it was Smithy who was abruptly stone cold.

One hand closed upon a pilot's shoulder with a grip of steel; his other pointed. "Down there—they're hiding back of that hill, picking off our ships from the side." And then, like a guiding beacon, a point of green showed once more.

The plane banked sharply while one of the pilots spoke crisp, clearly enunciated words into his phone. He listened; then: "Right!" he snapped. "Power dive for bow-gun firing. Level off for bombing from five hundred feet."

Off into the night they were headed. Then a left bank and turn brought the place of blazing flares and falling planes swinging smoothly into view; they were flying toward it.

AGAINST the white glare in the valley of death was a hill, roundly outlined. Then the ship's nose sank heavily down; and, from each broad wing, in straight, forward-stabbing lines, was the steady lightning of the Rickert batteries in action.

The pilot's room was a place of unbearable sound. The crash of gunfire, it seemed, must crush the glass wall like an eggshell by the sheer impact of its own thunder. In that pandemonium Smithy never knew when they flattened out. He knew only that the hill ahead twinkled brilliantly, and that each flashing light was an exploding shell. He knew when the hill passed beneath them.

Then, in the night, close beside them and just outside the pilot-room glass, was a quick glow of red. The plane lurched and staggered. Smithy clung desperately to the seat ahead. The pilot was fighting madly with the wheel. The roar of bombs from astern, where the bombers had launched their missiles at the approaching hill, was unheard. In a world suddenly gone chaotic he could hear nothing. He knew only that the valley dead ahead was whirling dizzily—that it sank suddenly from sight.

They were crashing. That red glow—they had been hit. Then something hard and firm was pressing against him, pressing irresistibly. It was the last conscious impression upon Smithy's mind.

CHAPTER XIX

The Voice of the Mountain

IN a strange new world surrounded by a group of kneeling figures of whom one, who called himself Gor, had spoken in Rawson's own tongue, Dean Rawson stood silent. It was all too overwhelming. He could not bring words together to formulate a reply. He only stood

and stared with wondering eyes at the exquisite beauty of the world about him, a world flooded with a golden light, faintly tinged with green. Then he looked above him to see the source of that light and found the sun.

Not the sun that he had known, but a flaming ball nevertheless. Straight above it hung, in the center of the heavens, a gleaming disk of pale-green gold, magnificently brilliant. He saw it through lids half closed against its glare. Then his gaze swept back down the blue vault of the heavens, back to a world of impossible beauty.

Directly ahead was a land of desolation, radiant in its barrenness. For every rock, every foot of ground, was made of crystal. Nearby hills were visions of loveliness where the colors of a million rainbows quivered and flashed. Veins of metal showed the rich blues and greens of peacock coloring. Others were scarlet, topaz, green, and all of them took the strange sunlight that flooded them and threw it back in blendings radiant and delicate.

The little hills began a short distance off, two low ranges running directly away. One on either side, they made brilliant walls for the flat valley between, whose foreground was barren rock of rose and white. But beyond the glistening barren stretch were green fields of luxuriant vegetation and in the distance, nestled in the green were clustered masses that might have been a city of men. Still farther on, a single mountain peak, white beyond belief, reared its graceful sweeping sides to a shining apex against the heavens of clear blue.

SLOWLY Rawson turned. A hundred yards away, at his left, there was water, a sea whose smooth rollers might have been undulating liquid emeralds that broke to infinite flashing gems upon the shore. He swung sharply to the right and found the same expanse of water, perhaps the same distance away.

Then he turned toward the shell, which had been behind him and the shaft from which it had emerged, and into which the air was driving with a ceaseless rushing sound. Now, looking beyond them, he found the same ocean; he was standing on a blunt point of rock projecting into the sea. The rest of this world was one vast expanse of water.

Suddenly Rawson knew that it was unlike any ocean of earth. Instead of finishing on a sharply-cut horizon, that sea of emerald green reached out and still out, and *up!* It did not fall away. It curved upward, until it lost itself in the distance and merged with the blue of the sky. It was the same on all sides.

He swung slowly back to face the land that perhaps was only an island. The kneeling ones had raised their bowed heads. They were regarding him from shining, expectant eyes. Only the girl kept her face averted. Rawson spoke to none of them; the exclamations that his amazement and dismay wrung from his lips were meant for himself.

"It's concave! It curves upward! I'm on the inside of the world! And that sun is the center! But what holds us here? What keeps us from falling?" He passed one hand heavily across his eyes. The excitement of the moment had lifted him above the weariness of muscle and mind. Now fatigue claimed him.

"Sleep," he said dully. "I've got to sleep. I've got to. I'm all in."

Gor was beside him in an instant. "Whatever you wish is yours," he promised.

RAWSON was to remember little of that journey toward the habitations of this people. Gor had

spoken at times along the way: "... the Land of the Central Sun.... The People of the Light, peaceful and happy in our little world...."

Rawson had roused himself to ask: "Who is at the head of it? Who is the king, the ruler?"

And the tall man beside him had answered humbly: "Always since the beginning one named Gor has led. My father, and those who came before him; now it is I. And when I have gone, my little son will take the name of Gor."

He had glanced toward the girl and his voice had dropped into the soft, liquid syllables of their own tongue. She had smiled back at Gor, though her eyes persistently refused to meet those of Rawson.

Again Gor spoke in words that Rawson could understand.

"I think at times," he said, "it is my daughter Loah, my little Loah-San who really rules. I, knowing not who you were, did not approve of this expedition, but Loah insisted. She had seen you, and—" A glance from the girl cut him short.

The words lingered in Rawson's mind when he awoke. The horrible experience of the past days were no longer predominant. Even his own world seemed of a dim and distant past.

HE awoke refreshed. He was in a new world and, for the moment, he asked nothing except to explore its mystery. He bathed under a fountain in an adjoining room, and grinned broadly as he wrapped the folds of the long golden loin cloth about him.

"As well be dead as out of style," he quoted. "And now to find Gor and Loah, and see what the devil all this is about—a talking mountain and a buried race that speaks first-rate American."

Gor was waiting for him in a room whose translucent walls admitted a subdued glow from outside. There was food on a table, strange fruits, and a clear scarlet liquid in a crystal glass. Rawson ate ravenously, then followed Gor.

Outside were houses, whose timbered frames of jet black contrasted startlingly with the quartz walls they enclosed. The street was thronged with people who drew back to let them pass, and who dropped to their knees in humble worship. Like Gor, the men wore only the loin cloth, but for this gala day, that simple apparel added a note of flashing color. The long cloths wrapped about their hips, and brought up and about the waist where the ends hung free, were brilliant with countless variations of crimson and blue and gold. The same rainbow hues were found in the loose folded cloths that draped themselves like short skirts from the women's waists. Here and there, in the sea of white bodies and scintillant, jeweled breastplates, was one with an additional flash of color, where brilliant silken scarves had been thrown about the shoulders of the younger girls.

"From all the land," said Gor, "they have come to do you honor."

HARDLY more than a village, this cluster of strangely beautiful shelters for the People of the Light. Beyond, Rawson saw the country, pastures where animals, weird and strange, were cropping the grass so vividly green; fields of growing things; little crystal houses like fanciful, glistening toys that had miraculously grown to greater size. The dwellings were sprinkled far into the distance across the landscape. Beyond them was the base of the mountain, magnificent and glorious in its crystal purity of white, and the striations, vertical and diagonal, that flashed brilliantly with black jet and peacock green.

Rawson knew them for mineral intrusions, and knew that the mountain was only one crystalline mass of all the quartz formation that made of the world's inner core a gigantic geode, gleaming in eternal brilliance under the glow of the central sun. And still, in it all, Dean Rawson had seen a lack without which perfection could not be complete.

"Where is Loah?" he asked of Gor. "I thought—I had hoped. . . ."

Something in Gor's face told Rawson that his companion was troubled. "She refused to come," he said. "But the wish of one of the great ones from the Land of the Sun is a command." He shouted an order before Rawson could put in a protest. A man darted away.

"Always happy, my little Loah-San," said Gor. His eyes held a puzzled look. "Always until now. And now she weeps and will not say why. Come, we will walk more slowly. There were questions you wished to ask. I will answer them as we walk."

"Questions?" exclaimed Rawson. "A thousand of them."

AND now for the first time since, at the top of a barren peak, in the dark of the desert night, his wild journey had begun, he found answers, definite and precise, to the puzzles he had been unable to solve.

Their speech—their language—how was it they could talk with him? He fired the questions out with furious eagerness, and Gor replied.

As to their speech—the Holy Mountain itself would explain. And yes, truly, this was the center of the world, or the sun above them was. The central sun did not attract, but instead repelled all matter from it—all things but one, the sun-stone, of which Gor would speak later.

Rawson pounced upon that and demanded corroboration.

"All the power of earth tends to draw every object to its center, yet we're here on an inner surface. We're walking actually head down. And our bodies, every stone, every particle of matter, ought by well-known laws to fall into that flaming center. But we don't! That proves your point—proves a counter gravitation. Then there must be a neutral zone. A place where this upward thrust is exactly equalled by gravity's downward pull."

"The zone of fire," said Gor. "You passed through it. Did you not see?"

"Saw it and felt it!" Rawson's mind leaped immediately to the next question.

"And we must have come through it at, surely, a thousand miles an hour. What drove us? That shell must have gone in from here. I can understand its falling one way, but not two. We should have come to rest in that very spot—and we'd have lasted about half a second if we had."

"Oro and Grah," said Gor. "Oro, the sun-stone, and Grah, the stone-that-loves-the-dark. But they are not stones, neither are they metal. We find them deep in the ground, clinging to the caves. A fine powder, both of them."

"Still I don't get it," said Rawson. "You drive that shell in from here, and then you drive it back again."

"That, too, I will explain later. It is simple; even the Dwellers in the Dark—those whom you call the mole-men—have Oro and Grah to serve them."

GOR launched into a long account of their tribal legends, of that time in the long ago when an angry sun god had driven his children inside the earth; of how Gor, and the son of Gor, and his

son's sons tried always to return.

Rawson was listening only subconsciously. They were circling the white mountain, ascending its lower slope. Now he could see beyond it as far as the land extended, and he was startled to find this distance so short. They were on an island, ten miles or so in length, and beyond it was the sea; he must ask Gor about that.

"It is all that is left," said Gor, when Rawson interrupted his narrative. "Once the land was great and the sea small—this also in the long ago—but always it has risen. The air we breathe and the water in the sea come from the central sun. The air rushes out, as you know; the water has no place to retreat."

Again he took up his tale, but Rawson's eyes were following the upward curve of that sea. They seemed to be in the bottom of a great bowl; he was trying to estimate, trying to gage distance.

". . . and so, after many generations had lived and died, they found the Pathway to the Light," Gor was saying. "It is our name for the shaft through which you came. This was thousands of your years ago, when he who was then Gor, and the bravest of the tribe, descended. Even then they were workers in metal and they knew of Oro and Grah. They were our fathers, the first People of the Light."

RAWSON had a question ready on his tongue, but Gor's words suggested another. "That shaft," he said, "the Pathway to the Light—do you mean it extends clear up to the mole-men's world? Why don't they come down?"

"To them the way is lost; the Pathway is closed above the zone of fire. That other Gor did that. And those who remained—the mole-men—have forgotten. They could break their way through if they knew—they are master-workers with fire—but for them the Pathway ends, and below is the great heat. But we know of a way around the closed place, the hidden way to the great Lake of Fire."

"They could break their way through if they knew!" repeated Rawson softly. For an instant he stood silent and unbreathing; he was remembering the ugly eyes in a priest's hideous face. The eyes were watching him as the White Ones took him away.

He forced his thoughts to come back to the earlier question. "What," he asked, "is the diameter, the distance across the inside world? How far is it from here to your sun. How many miles?"

"Miles?" questioned Gor. "We know the word, for the Mountain has told us, but the length of a mile we could not know. This I can say: there were wise men in the past when our own world was larger. They worked magic with little marks on paper. It is said that they knew that if one came here from our sun and kept on as far again through the solid rock, he would reach the outside—the land of the true sun, from which our forefathers came."

Rawson nodded his head, while his eyes followed that sweeping green bowl of the sea. "Not far off," he said abstractedly. "Two thousand miles radius—and the earth itself not a solid ball, but a big globular shell two thousand miles thick. I could rig up a level, I suppose; work out an approximation of the curvature."

From the smooth winding path which they had followed there sounded behind them hurrying footsteps; a moment later Loah stood beside him.

HER eyes gave unmistakable corroboration of what Gor had said of that torrent of tears.

but she looked at Dean bravely, while every show of emotion was erased from her face. "You sent for me," she said.

And Rawson, though now he knew he could speak to her and be understood, found himself at a loss for words.

"We wanted you with us, Gor and I," he began, then paused. She was so different from the girl whose smiling eyes had welcomed him. The change had come when he spoke those first words on his arrival, and now she was so coldly impersonal.

"I wanted to thank you. You saved my life; you were so brave, so . . ." Again he hesitated; he wanted to tell her how dear, how utterly lovely, she had seemed.

"It was nothing; it has pleased me to do it," she said quietly, then walked on ahead while the others followed. But Rawson knew that that slim body was tense with repressed emotion. He had not realized how he had looked forward to seeing again that welcoming light in her eyes. He was still puzzling over the change as they entered a natural cave in the mountainside.

A winding passage showed between sheer walls of snow white, where giant crystals had parted along their planes of cleavage. Then the passage grew dark, but he could see that ahead of them it opened to form a wider space. There were lights on the walls of the room, lights like the one that Loah had carried. And on the floor were rows of tables where men were busy at work, writing endlessly on long scrolls of parchment.

"THE Wise Ones," Gor was saying, "Servants of the Holy Mountain." Yet even then men knelt at Rawson's coming as had the other more humble people. They then returned to their tables, and in that crystal mountain was only the sound of their scratching pens and the faint sigh of a breeze that blew in through a hidden passage to furnish ventilation.

Yet there were some at those tables whose pens did not move; they seemed to be waiting expectantly. One of them spoke. "The time is near," he said. "Are the Servants prepared?"

And the waiting ones answered: "We are prepared."

Rawson glanced sharply about. "What hocus-pocus is this?" he was asking himself. Still the silence persisted. He looked at the waiting men, motionless, their heads bent, their hands ready above the parchment scrolls. He saw again the white walls, the single broad band of some glittering metal that made a continuous black stripe around walls and ceiling and floor.

"What kind of ore is that?" he was asking himself silently. "It's metallic; it runs right through the mountain. I wonder—"

His idle thoughts were never finished. A ripping crash like the crackle of lightning in the vaulted room! Then a voice—the mountain itself was speaking—speaking in words whose familiar accent brought a sob into his throat.

"Station K-twenty-two-A," said the voice of the mountain, "the super-power station of the Radionews Service at Los Angeles, California."

"IT'S tuned in!" gasped Rawson. "Tuned in on the big L. A. station! A gigantic crystal detector! Those heavy laminations of imbedded metal furnish the inductance." Then his incoherent words ended—the mountain was speaking.

"Radiopress dispatch: The invasion of the mole-men has not been checked. Army Air Force fought a terrific engagement about midnight, last night, and met defeat. Over

one hundred fighting planes were brought down in flames. Even the new battle-plane type, the latest dreadnoughts of the air, succumbed.

"Heavy loss of life, although civilian population of three towns had been evacuated before the mole-men destroyed them. Gordon Smith is reported killed. Smith was associated with Dean Rawson in the Tonah Basin where the mole-men first appeared. With Colonel Culver of the California National Guard, Smith was returning from Washington in an Army dreadnought which crashed back of the enemy's lines."

Rawson's tanned face had gone white; he knew the others were looking at him curiously, all but the men at the tables whose pens were flying furiously across the waiting scrolls. Before him the face of Loah, suddenly wide-eyed and troubled, swam dizzily. He could scarcely see it—he was seeing other sights of another world.

"They're out," he half whispered. "The red devils are out—and Smithy—Smithy's gone!"

CHAPTER XX

Taloned Hands

SIMPLE, pastoral folk, the People of the Light! In their inner world, a vanishing world, where nearly all of what once had been a vast country was now covered by the steadily encroaching sea, they had resisted the degeneration which might easily have followed the destruction of a complex civilization. Living simply, and clean of mind, they had clung to the culture of the past as it was taught them by their Wise Ones. And now the People of the Light had found a new god.

Not that Dean Rawson had asked for that exalted position; on the contrary he had tried his best to make them understand that he was only one of many millions, some better, some worse, but all of them merely humans.

His speaking the language of the holy mountain had convinced them first. But when old Rotan, oldest and grayest of the mountain's servants, went into a trance, then Rawson could no longer escape the honors being thrust upon him.

"The time of deliverance is at hand," old Rotan said when he awoke. His voice that so long had been cracked and feeble was suddenly strong, vibrant with belief in the visions that had come to him.

They were in the inner chamber of the white mountain, where Dean Rawson, heartsick, lonely and hopeless, had spent most of his time listening to the voice from the outer world. Gor was there, and Loah; and the writers had left their desks to gather around old Rotan, where now the old servant of the mountain stood erect, his glistening eyes fixed unwaveringly upon Rawson.

"Listen," he commanded. "Rotan speaks the truth. Never shall the People of the Light return to the outer world; it is here we stay. For now our world which is lost shall be returned to us." His eyes, unnaturally bright, met the wondering gaze of his own people gathered around, then came back to rest again upon Rawson.

"DEAN—RAH—SUN!" he said. "'Rah'—do you not see? It is our own word, Rah—the Messenger! Dean—Messenger of the Sun! The sun-god has sent him—he will set us free. He will restore our lost cities. The People of the Light will spread out to fill the new land; they will multiply, and once more will be a mighty nation, living happily as of old in their own lost world.

"Dean!" he called. "Dean—Mes-

senger of the Sun!" He was drawn to his full frail height, his arms outstretched. But Rawson saw the old eyes close, sensed the first slackening of that tense body; it was he who sprang and caught the sagging figure in his arms, then lowered the lifeless body to the floor of crystal white.

Even happiness can kill. A feeble heart can cease to beat under the stress of emotions too beautiful to be borne. And Rotan, wisest of the wise, had passed on to serve his sun-god in another world.

And thereafter, Rawson, Dean-Rah-Sun, was undeniably a god. But he wondered, even then, while the others dropped to their knees in humble worship, why Loah, her eyes brimming over with tears, had broken suddenly into uncontrollable sobs and had rushed blindly, swiftly, from the room.

TO Rawson the unwavering, simple faith of the White Ones was only an added misery. Rotan's vision was accepted by them unquestioningly; their adoring eyes followed Rawson wherever he went, while the children carpeted his path to the holy mountain with golden flowers.

And there Rawson would sit, cursing silently his own helplessness, while the voice of the mountain told of further devastation up above. His plans for leading a force against the mole-men were abandoned. On the island, all that was left of this inner world, were only some two thousand persons, men, women and children. And the children were few; the population had been rigorously kept down. Their present number was all that the island would support, though every possible foot of ground was tilled.

"Only a handful of them," Rawson admitted despondently, "and not a weapon of any sort. They've kept by themselves. Only Loah and a few of the others had enough curiosity and nerve to scout around where the mole-men live. She even understands their talk! Lord, what I'd give for a thousand like her, a thousand men with her nerve! Then, with weapons, and means of transportation. . . ." But at that he stopped, aware of the futility of all such thoughts.

He had tried to talk to Gor, tried to tell him of his own limitations. And Gor had only smiled pleasantly and repeated "Rotan has spoken. It will come to pass!"

Ceaselessly his thoughts revolved about the hopelessness of his situation. He was alone. Whatever was to be done he must do single-handed—and there was nothing he could do! But he would not admit to himself that the aching loneliness came to a focus in the memory of a girl's smiling eyes, the touch of her soft hand.

"They're fighting up there," he argued, "fighting for their lives, and I can't help. What right have I to think of Loah or myself?" In spite of which he sprang abruptly to his feet, left the mountain and the voice of the mountain behind him, and went in search of the girl.

"I've got to make her understand," he exclaimed. "I've got to have someone to talk to. But I can't make her out. She's so confoundedly respectful—acts as if I were a little tin god. And yet—she wasn't always that way!"

AT the home of Gor he found Loah, slim and beautiful as always. She had just come from the bath. The creamy texture of her skin had flushed to rosiness in the cold fountain. Her jeweled breastplates sparkled. A cloth that shone like silk enwrapped her hips in soft folds of pale rose and hung in an absurd little skirt. She might

have been the spirit of youth itself, a vision of loveliness; yet Rawson felt an almost uncontrollable desire to take her in his two hands and shake her when she bowed humbly and treated his request as if it were a royal command.

"To walk with Dean-Rab-Sun! But certainly, if that is his wish!"

In silence they left the village and walked toward the island's end where Rawson had emerged from the underworld.

The island was not large. On either side were low hills, mere knolls, of white crystal, where, in every hollow, men and women were harvesting strange grain. Between the two ranges of hills were flat fields of green, reaching out toward the point some three miles distant.

Rawson made no attempt to talk as he led Loah along the roadway that cleft the green expanse in half. Other workers were there, and Dean acknowledged their smiling, worshipful salutations. He did not want to talk now; he wanted to find some place where he and Loah could be by themselves. There was so much he must tell her. He must try to make her understand. And after that, perhaps, with her help, he could find some way to be of aid to his own beleaguered people—something he could do even single-handed.

WHERE the fields ended, and from there on toward the point, had been an expanse of glistening white. Rawson remembered it plainly. So now, when he found it a place of flaming crimson, he stared in amazement. Across the full width of the valley a brilliant carpet had spread itself, a covering of flowers. A blossoming vine had sprung up in the few days since his arrival and had woven a thick mat of vegetation.

He wanted to go on out to the extreme end of the point. There they would be alone. But Loah objected when he started to enter the red expanse.

"No!" she said in quick alarm. "We must not cross. It is the Place of Death. We will go around it, following the hills."

"We crossed it the other day when it was a plain of white salt," argued Rawson.

"But now the flowers have come. Even now it might be safe—but when they die then nothing can cross here and live."

Loah could not give the reason. Dean gathered from what she could tell that a gas of some sort was formed, perhaps by the decomposing vegetation. Perhaps it combined with the sparkling white shale. But all this was of no consequence compared with his own problems. He did not argue the matter but followed where Loah led.

"Where is the shell?" he asked, when they stood at last near the open mouth of the great shaft into which the air was rushing. "Where is the machine that we came here in? I wanted to see it—thought perhaps I could use it later on.

"The jana—the shell, as you call it—is safely locked in a great room of Gor's house. Not all understand its use; it must be kept away from careless hands."

THEN Rawson put that thought aside. He took Loah's hand and led her some distance away toward the shore. Beyond a rocky, crystalline mass, where fragments had been heaped, the sound of the rushing air was lost; only the flashing emerald waves whispered softly on the shore beyond. And there in that quiet place, under the brilliance of the central sun, Rawson told her of himself and of the great outer world. He told her of his work, of everything that had happened, of how he was only one of many millions of men and women

like, and yet unlike, the People of the Light. And at last he knew that she understood.

He had spoken softly, though he knew there were no other listening ears. Loah had been seated before him on one of the white blocks. Sh rose to her feet. Her eyes were troubled. Vaguely he sensed behind them a conflict of emotions.

"I must think," she said. "I will walk by myself for a time; then I will return."

Rawson reached for her hand. "You're a good sport," he said huskily. Then he felt the trembling of that hand in his; and, as if it had been an electric current, his own body responded.

Shaken in every nerve, his poise deserted him. He could not think clearly. He knew only that that horrible loneliness was somehow gone. By force of will alone he kept his arms from reaching out toward that radiant figure. Instead, he raised her hand toward his lips.

She withdrew it sharply. "No," she said, "our Wise Ones were mistaken. For years they have listened to the mountain; they have written down its words. Slowly they have learned their meaning. A kiss, they said, was a symbol of love in your world. They were mistaken—as was I. Now I will walk alone for a time."

RAWSON let her go. She seemed hardly looking where she went; her eyes were downcast. She moved slowly around the sheltering rock and on toward the level ground and the rushing winds of the shaft.

His own thoughts were in a whirl, too confused with emotion for clear thinking. "A symbol of love!" And back there in that cave world she had pressed her lips to his hand. Then they had come here, and he had been transformed to a god, a being who could never have more than an impersonal affection for one as humble as she.

The rising flood of happiness within him was abruptly frozen, changed to something which filled his veins with ice. For, from beyond the crystal barrier that hid Loah from his view, her voice had come in one single cry of terror. Then, "Dean!" she called. "Dean Sanf" But by then Rawson was throwing himself madly around the barricade of rocks.

Like a sensitized plate when the camera's shutter is opened a merest fraction of a second, Rawson's brain took the imprint of every detail that was there. The black mouth of the shaft, and, on the rock beside it, something metallic, brilliantly gleaming—a flame-thrower! Beyond the pit was Loah, half crouching, her slim body tense as if checked in mid-flight. She had been running toward him, coming to warn him. And, between her and the shaft, his back turned squarely toward Rawson, was the hideous figure of a mole-man, one of the Reds! His grotesque, pointed head was bent forward toward the girl; his arms were reaching, the long fingers like talons.

RAWSON did not know when he called the girl's name. But he knew the instant that he had done it and he knew it was a mistake. He should have crept quietly, seized the weapon—and now his feet tore madly on the white rock floor as he raced toward the shining implement of death. From beyond, the red figure, whirling at his call, leaped wildly for the same prize.

The taloned hands were on the flame-thrower first. Rawson saw the red body straighten, saw the weapon swing, glistening in air, swinging over and down. From its tip green fire made a straight line of light.

He leaped in under the descend-

ing flame, felt the nozzle of the projector as it crashed upon his right shoulder and the green fire spat harmlessly beyond his back. That last spring had thrown him bodily against the red monster. They were both knocked off balance for a moment, then Rawson caught himself and swung with his left. He set himself in that fraction of a second, felt the first movement of that shining, crook-necked tube that meant the green flame was being drawn back where it could reach him; then his fist crashed into a yielding jaw.

Not five feet from the brink of that nearly bottomless shaft he stood wavering in the rush of air. He knew that the ugly red figure had toppled sideways, that the weapon had fallen with him, the blast swinging upward in a vertical, hissing arc—then man and weapon had dropped silently into the pit.

He was alone, save for the girl, who, her eyes wide with horror, threw herself upon him and clung trembling, while she murmured incomprehensible endearments in her own tongue wherein his own name was mingled: "Dean, dear! My own Dean-San!"

But the mole-men! Dean Rawson's mind was aghast with the horror of it: the mole-men had now found the way.

CHAPTER XXI

Suicide?

GORDON SMITH, sometimes known as Smithy, was to remember little of the happenings that followed the crash of the big Army dreadnought. It was Colonel Culver who dragged him from the pilot-room wreckage. Colonel Culver and one of the pilots whom he had restored to consciousness. They lowered Smithy carefully to the ground, then explored the rest of the ship.

Their hands were red when they returned—and empty. Captain Farrell and the rest of the crew had ceased to be units of the United States Army Air Force; henceforth they would be only names on a casualty list grown ominously long.

"Stood plumb on her tail," said the pilot, staring at the wreck. "They hit us just once, and the left wing crumpled like cardboard. Last I remember was pulling her up off the trees." He stared at the mass of twisted metal and the center section where the wing had torn loose; it stood upright, almost vertical, resting on the crushed tail.

"Funny," said the pilot in the same flat, level tone that seemed the only voice he had since that last pull on a whipping wheel. "Damn funny—mostly we get it first up there."

"Come here!" snapped Colonel Culver. "Lend a hand here with Smith; we've got to carry him. And don't talk so loud—those red devils will be out here any minute."

SMITHY was taking a more active interest in his surroundings when he sat a week later in the Governor's office.

"There's a detachment moving in there from the south," said the Governor. "We're going to follow your advice, to some extent at least. We're sending troops to Tonah Basin. If the top of that dead crater is closed they will blast it open; then a scouting party's going down. Call it a reconnaissance, call it suicide—one name's just as good as the other. Colonel Culver, here, is going. But you know the lay of the land there; you could be of great help. How about it?"

"Are you asking *me*?" Smithy inquired.

He stood up, flexed his arms, while he grinned at Colonel Culver. "Hinges all greased and working!

As a flier, Colonel, you're a darn good first-aid man. I'll say that! When do we start?"

Which explains why Smithy, some time later, hidden under the grotesque disguise of a gas mask, was one of fifty, similarly attired, who stood waiting about the black, open maw in the great cinder-floored crater of one of the peaks that surrounded Tonah Basin.

Night. And the big stars that hang so low in the black desert sky should have been brilliant. They were lost now in the white glare that streamed upward. The crater was a fortress. Around the circle of the entire rim, on the inner side of the rough crags, men of the 49th Field Artillery stood by their guns. Lookouts trailed their telephone wire to the higher peaks, where they perched as shapeless as huddled owls; and, like owls, their eyes swept the mountain's slopes and the desert at its base, where the searchlight crews played long fingers of light incessantly—and where nothing moved.

But the empty silence of the desert was misleading, as the men in the crater knew.

THEY had begun arriving with the earliest light of morning. Smithy had come in with the first lot. And when the first big autogyro transport had settled and risen again from the crater, another had taken its place, and another and many others after that.

That first crew had been a machine-gun battalion, and Smithy had smiled with grim satisfaction at the unhurried way in which their young captain had snapped them into position without the loss of a second. And their guns, Smithy noticed, were trained inward upon the crater itself.

Inside that protecting circle the other transports landed one by one: men, mobile artillery, ammunition cases, big searchlights, and a dozen engine-generator outfits. The last transports brought in strange cargo—short sections of aluminum struts with bolts and splice plates to join them together; blocks, and tackle and sheaves; then spools of steel alloy cable at least ten miles in length.

From the last ship they took a hoisting engine and an assortment of aluminum plates and bars which were bolted together by waiting mechanics, and which grew magically to a crude but exceedingly substantial elevator, on which fifty men, by considerable crowding, could stand.

Only a floor of bolted plates, with corner posts and diagonal bracing and a single guard rail running around the four sides—but for the first time Smithy began to feel that he was actually going down; that this was not all make-believe, or a futile gesture. He would stand on that platform; he would go down where Dean had gone. And then.... But what would come after he knew he could never imagine.

A LITTLE crane swung the first metal work into position above the shaft. One end of the assembled framework of aluminum alloy dragged loosely on the ground; the other end swung out and projected above the shaft, swayed for an instant—and then came the first direct knowledge of the enemy's presence. The end of a metal strut, though nothing visible was touching it, grew suddenly white hot, sagged, then broke into a shower of molten, dazzling drops that rained down into the pit.

"Good," said Colonel Culver, who was standing beside Smithy. "Now we know they are there—but it means we will have to go down there with our gas masks on."

To Smithy it was not immediately apparent how gas masks were to

protect them from the deadly invisible ray. He got the connection of thoughts when a bomb was slid over the edge. The dull thud of the explosion quickly came back to them.

"They popped that one off in the air—hit it with their heat ray," said a cheerful voice beside them. "But the phosgene will keep on going down. Give them another!"

The interval this time was longer. "Now for a dirty crack," said the cheerful voice. "Time this one."

A YOUNGSTER nearby snapped a stop-watch as the bomb was released. He held some printed tables in his hands. Odd receivers from which no wire led were clamped over his ears. This time the dull thud was long in coming. It was hardly perceptible when the young man with the stop watch announced: "Fifty thousand feet, sir."

"Give 'em another. Time it again." A second high explosive bomb was released.

"Fifty thousand feet, sir."

"Good. That measures it. And those last bombs have knocked the devil out of whatever machinery they've got down there. Now we'll give them a real taste of gas. Two of the green ones there, men. Put ten miles of cable on the drums. Get that hoisting frame into place."

But night had come, though searchlights outside the crater and floodlights within had robbed the night of its terror, when Smithy, with Culver beside him, climbed over the guard rail of the lift that hung waiting just over the pit.

A gas mask covered his entire face. Through its round eye plates he looked at the others who crowded about him. Grotesque, almost ludicrous—twenty men, armed with clumsy sub-machine guns; the others would follow later. A searchlight was on a tripod at the center, and a spool of electric cable.

The light sizzled into life and swung slowly about. Then the platform jarred, and the spool of cable began slowly to unwind. Beside him Colonel Culver was returning the salute of an officer outside on the ashy ground. Smithy raised his hand, but the brink of that pit had moved swiftly up—there was nothing before him but a glassy wall.

Reconnaissance? Suicide? One word was as good as another. But he was going down—down where Dean Rawson had gone—down where there was a debt to be paid.

CHAPTER XXII

The Red-Flowering Vine

"ROTAN," said Gor slowly, sadly, "was wrong. His vision was not the truth. The Red Ones have come. And now—we die."

"Without a fight?" Rawson demanded incredulously.

"We are not a fighting people. We have no weapons. We can only die."

Rawson turned to Loah. They were inside the mountain, and the servants of the mountain, with terror and dismay written plainly on their faces, were gathered about. "At the Lake of Fire," said Rawson, "when you saved me, there was an explosion and clouds of white fumes. What was it?"

"It was like water," Loah said. "We found it deep inside the earth in a place where it is very cold. When warmed it turns to white clouds. We threw a flask of it on the hot rocks, hoping to reach you while they could not see."—she paused and shook her head slowly—"but we can get no more. The Pathway of Light is closed to us, now that the Red Ones are there."

"Liquefied gas of some sort," said Rawson briefly, "caught in enormous rock pressure. But that's out! Now what about this Place of Death? There's an idea there."

The White Ones were numbed with fear, but Loah and Gor accompanied him when Rawson returned to the red field. The flowers were still in bloom; they waved gently in the breeze that blew always from the mountain across the fields and out toward the point, where even now dark figures could be seen near the mouth of the shaft.

"It will be many of your days," said Loah, "before the flowers die. If you thought to trap the Red Ones in the Place of Death, there will not be time. . . ." But Rawson had left them; he had advanced into the scarlet field and dropped to his knees

HE was crushing the vines in his hands, grinding them into the white, salty earth underneath. Then he passed his hands guardedly before his face as if to detect an odor.

Loah and Gor saw him shake his head slowly while he spoke aloud words that they could not understand. "Cyanide," Dean Rawson was saying. "It's a cyanide of some sort—releases hydrocyanic acid gas. I could have rigged a generator, though I've forgotten about all of my chemistry—and now there isn't time." Off in the distance the dark figures still moved near the end of the point.

He made no effort to conceal his dejection as he returned. The edge of the Place of Death made a winding line across the scant half mile of valley where the green fields ended abruptly.

Dean stepped high over the stone trough a half mile long that marked that dividing line. There was water in it; it was part of their irrigation system. A little beyond, in the midst of the green, stood a tiny flat-topped knoll on which he knew was a pool that supplied the crude system. Beyond it Loah and Gor were waiting.

Gor read the look on Rawson's face. "It is useless," Gor said. "And now I have decided. The People of the Light must die—but not in the fires of the Reds. With my people I shall walk into the sea."

And Rawson could not protest. He could only follow as Gor turned back toward the village and the mountain beyond.

FROM a spur on the mountainside Rawson could see the full length of the island. One way lay the village; beyond it the green fields; then the wide scarlet band of the Place of Death. And beyond that the little crystal hills and the valley between that led out to the point. It was now dark with massed clusters of bodies, red even at that distance. He could even see the glint of metal from time to time.

And behind the mountain were the People of Light, where Gor was only waiting for the attack to lead them out to the island's farther end and then on to a kindlier death in the emerald sea. Only Loah was with Dean, although there were others of the White Ones not far away, watching, ready to warn Gor when the attack began.

Not an hour before, Rawson had stood in the inner chamber and had listened to the mountain as it repeated the words of a far-distant man: "Attack of the mole-men growing increasingly ferocious . . . heat-ray projectors—almost invincible . . . our forces have entered the Tonah Basin—they are descending into the crater. But whether warfare can be carried on advantageously under ground is problematical. . . ." Rawson unconsciously gritted his teeth behind his set lips as he watched the Reds.

He knew why they had been so slow in attacking. They must have a carrier of some sort, a shell like that of Loah's, and they were

bringing their fighters one shell-load at a time. When the entire force was ready they would attack. And Rawson was convinced that this force would be limited in number.

"They'll have plenty to keep them busy up there," he argued. "If only we could wipe out this one lot we could prepare to defend ourselves." And now, standing on the side of the mountain, he startled Loah with the fury of his sudden ejaculation.

"Fool! Quitter! Waiting here for them to come and get you! There's one chance in a million—" Then he was rushing at full speed along the roadway that circled the mountain toward Gor and the terrified throng.

THE waiting savages must have laughed, if indeed laughter was possible for such a race, at sight of the White Ones creeping timidly down. Off a mile and more they could see them harvesting their strange crop—harvesting!—storing up supplies of food, no doubt, when the mole-men with their flame-throwers would reap the harvest so soon!

But in a crimson field Dean and Gor and Loah led the others where they swarmed across the Place of Death, gathering huge armfuls of the red-flowering vine, carrying them to the village and returning for more. Where they trod it was as if peach pits were crushed beneath their feet. And there was a curious fragrance which Rawson told them not to breathe, but to keep their faces always into the wind.

Their hands and bodies were sore and burned by the strong juice of the vines. They stopped often to cast apprehensive glances at the distant group of red figures, and always Rawson drove them in a frenzy of haste. At last he made them move the long trough of stone beyond the edge of the green field and over into the Place of Death.

Rawson kept no track of the time. The voice of the mountain was his only measure of hours in a world of perpetual day. But more hours—another day, perhaps—had passed when the Red force at last began to move.

THEY did not spread out wide across the valley, but formed a straggling line that was denser toward the center. They could not know what opposition they would meet; for the present they would stay together. Above them as they came were twinkling lights of pale-green fire.

The radio had spoken of heat rays; Rawson wondered if that meant some newer and more horrible instrument. But he saw nothing but the flame-throwers in the armament of this force.

He was waiting by the irrigation pool, hidden for the moment behind the little knoll. Loah was with him; he had tried in vain to induce her to stay with Gor and the others who were waiting beyond the mountain.

There were watchers, some of them within hearing, whose voices relayed the news of the enemy's advance. Then they ran; panic was upon them.

"*Tur—gona!*" they cried. "*Nu—tur—gona!* We die! Quickly we die!" Rawson heard the shout carried on toward the hidden throng.

Cautiously he peered from the little knoll. They were coming. Already they were trampling the remaining red blooms on the farther edge of the field. But he waited till they were halfway across before he leaped to the top of the knoll, grasped a pole he had placed there in readiness and rammed it down through the pool, turbid yellow with the juice from the vines, and broke open the outlet he had plugged in the base.

ONE green light slashed above his head. One flicked at the knoll near his feet, where green growing things burst into flame—then he threw himself backward down the short rocky slope while the stones tore at his nearly nude body. He sprang to his feet and held Loah close. On either side of the knoll was a holocaust of flame where green lights played. He waited breathlessly. The fires brought in a little back draft of air, the scent of peach pits was strong—and then the green lights ceased. The unripe grain of the fields smoldered slowly.

Then Rawson stepped from his hiding and stared out at the Place of Death.

Nearby was a huddle of bodies. On either side, in a long, straggling line, they lay now on the ground—a windrow where Death had reaped. The flames of their weapons still in action were all that moved. The white earth turned molten wherever those flames struck.

Farther off there were red things that were running. The yellow liquid from the pool, charged with the acid of the vines, had been slow in flowing out through that long trough. The savages could only see that their fellows had fallen. Some mystery, something invisible and beyond their comprehension had struck them. They ran toward the center at first, then turned and fled—and by then the soft air blowing gently about them had brought that strange fragrance of death. Then they, too, lay still.

From the distance came faintly a booming chant, two thousand voices raised in unison. "*Tur—gons! Nu—tur—gons!*" The last of a once mighty people were marching to their death.

Rawson and Loah turned with one accord. Victory was theirs, but there was no time to taste the fruits of victory. They ran with straining muscles and gasping breath toward the distant mountain and the marching host beyond.

"MY plans are made," Rawson spoke quietly. "I must go. I shall take the shell—the jana—and go back to the mole-men's world. I shall go alone, and I shall die, but what of that?" His eyes lit up for a moment. "I'll try to find *Phee-e-al* first. If I can get him before they get me, that will help."

They were standing on the mountain's lower slope. Gor and Loah and the servants of the mountain gathered near. Below, the White Ones were massed in worshiping silence. Had not Dean-Rah-Sun saved them? And now what else would come to pass?

The same question had been asked by the Wise Ones, and now Rawson turned and spoke to them. "Kotan was right," he told them. "His vision was true. There is work I must do here before I go. Your lands, or some of them at least, will be restored. And you will be safe forever from what we have seen today. Gor will lead you wisely, and Loah . . ." His voice faltered; he had kept his eyes resolutely away from the slim figure of the girl, who had been wordless, scarcely breathing. Now she stepped swiftly before him.

"You must go, Dean-San," she said gently. He knew it was a term of endearment. "You must go if you say you must. But you do not go alone, nor die alone. Long ago the voice of the mountain spoke beautiful words. I know now it was one of your priests telling of a woman of your own race. Always have I remembered. 'Whithersoever thou goest, I shall go; thy people. . . .'"

But Dean Rawson had gathered the slender figure, starry-eyed and sobbing, into his arms.

(To be concluded.)

The Passing of Ku Sui

A Complete Novelette

By Anthony Gilmore

CHAPTER 1

The Plan

THE career of Hawk Carse, taken broadly, divides itself into three main phases, and it is with the Ku Sui adventures of the second phase that we have been concerned in this intimate narrative. John Sewell, the historian, baldly condenses those adventures of a century ago together, but on research and closer scrutiny they take on an individuality and significance deserving of separate treatment, and this they have been given here. For fictionized presentation, we have spaced the adventures into four connected episodes, four acts of a vibrant drama which ranged clear from Saturn to Earth, the core of which was the feud between Captain Carse and the power-lusting Eurasian scientist, Dr. Ku Sui—that feud the reverbations of whose terrible settling still echo over the solar system—and in this last act of the drama, set out below, we come to its spectacular climax.

> A screaming streak in the night—a cloud of billowing steam—and the climax of Hawk Carse's spectacular "Affair of the Brains" is over.

The words of John Sewell's epic history sit lightly on paper; easy words for Sewell, once the collection of data was over, to write; not very significant words for the uninitiated and casual reader who does not see the irresistible forces beneath them. But consider the full meaning of these words, and glance for a moment at the two figures conjured

Like a projectile Hawk Carse shot out in a direction away from Earth

up by them. We see Hawk Carse, a man slender in build, but with gray eyes and lithe, strong-fingered hands and cold, intent face that give the clue to the steel of him; we see Dr. Ku Sui, tall, suave, unhurried, formed as though by a master sculptor, in whose rare green eyes slumbered the soul of a tiger, notwithstanding the courtesy and the grace that masked always his most infamous moves. These two we see looming through and dwarfing Sewell's words as they face each other, for they were probably the most bitter, and certainly the most spectacular, foemen of that raw period before the patrol ships swept up from the home of man to lay Earth's laws through space.

Carse and Ku Sui, adventurer and scientist, each with his own distinctive strength and his own unyielding character—those two were star-crossed, fated to be foes, and whenever they met there was blood, and never was quarter asked nor quarter expected. How could it have been otherwise? Ku Sui controlled the isuan drug trade, and Carse was against it, as he was against everything underhanded and unclean; Ku Sui had tricked and, by a single deed, driven Carse's loved comrade, Master Scientist Eliot Leithgow, from his honored position on Earth, and Carse was sworn to bring Ku Sui to Earth to clear the old scientist's name. Either of these alone was enough to seal the feud, but there was more. Carse was sworn to release from their bondage of life-in-death Ku Sui's most prized possession, his storehouse of wisdom—the brains of five great Earth scientists, kept alive though their bodies were dead.

These, then, were the forces glossed over so lightly by John Sewell's words. These the forces that clashed in the episode set out below; that clashed, then drew apart, and knew not one another for years. . . .

• • •

IT will be recalled that, in the second of these four episodes, "The Affair of the Brains,"* Hawk Carse, Eliot Leithgow and the Negro Friday broke free from Dr. Ku's secret lair, his outwardly invisible asteroid, and in doing so thought they had destroyed the Eurasian and all his works, including the infamous machine of coordinated brains. In the third episode, "The Bluff of the Hawk,"** it will be remembered that the companions came in Dr. Ku's self-propulsive space-suits to Satellite III of Jupiter; and that there Carse learned that in reality the Eurasian and the brains had survived, and that Dr. Ku might very possibly soon be in possession of a direct clue to Leithgow's hidden laboratory on Satellite III. We saw Carse take the lone course, as he always preferred, sending Leithgow and Friday to his friend Ban Wilson's ranch while he went to erase the clue. And we saw him achieve his end at the fort-ranch of Lar Fentril, strong henchman of Ku Sui, and, in brilliant Carse fashion, turn the tables and escape from the trap that had seemingly snared him, and proceed towards where, fourteen miles away, Leithgow and the Negro were waiting for him.

His three friends were waiting very uneasily that day. Eleven hours had passed since Leithgow and Friday had parted from the Hawk, and they had heard nothing from him. They knew he was going into high peril; Leithgow had in vain tried to dissuade him; and so it was with growing fear that they watched the hours pass by.

---

*See the March, 1932, issue of Astounding Stories.
**See the May, 1932, issue of Astounding Stories.

With Ban Wilson, they sat near dawn in the comfortable living room of the ranch's central building. Although largely rested from the ordeal of the journey to Satellite III, the huge Negro was fidgety, and even Leithgow, more controlled, showed the strain by continually raising his thin white fingers to his lined face and stroking it. Wilson's men were on watch outside in the graying darkness, but often Friday supplemented them, going to the door, staring down to the beach of the bordering lake, staring up to the skies, staring at the black and murmurous flanks of the jungle—staring, scowling and returning to sit and look gloomily at the floor.

BAN WILSON was the most active, physically. He was a miniature dynamo of a man, throbbing with a restless, inexhaustible tide of energy. Short and wiry, he stared truculently at the universe through wonderfully clear blue eyes, surrounded by a bumper crop of freckles and topped by a mat of bristly red hair. His short stub nose had prodded into countless hostile places where it most emphatically was not wanted. It would be hardly necessary to old acquaintances of his to say that he was now speaking.

"No, sir! I say the Hawk's safe and kicking! Can't kill *him!* By my grandmother's false teeth, I swear I'd follow him to hell, knowin' I'd come out alive and leavin' the devil yowlin' behind with his tail tied into pretzels! He said he would meet you here? Well, then, he will."

Friday looked up mournfully

"Yes, suh, Cap'n Ban; but Cap'n Carse was going into a pow'ful lot of trouble. An' he was worn an' tired, an' he only had a space-suit an' a raygun, an' you know he wouldn't stop for anything till he'd done what he set out to. I kind of feel . . . I dunno . . . I dunno . . ."

"By Betelgeuse!" swore Ban Wilson, "if he doesn't come soon I'll take that damned Porro apart till I find him!"

Eliot Leithgow gave up the late radio newscast from Earth he had been pretending to read. A brief silence fell, and through it the old scientist seemed to feel something, seemed to expect something. And he was not mistaken.

"*Who's there?*"

It was a cry from one of the watchers outside Friday leaped out of his uneasy seat and was through the door even before Ban, who followed with Leithgow. They heard the Negro roar from ahead:

"Cap'n Carse! Cap'n Carse! Sure enough, it's Cap'n Carse!"—and they saw his great form go bounding down to the gray-lit beach of the lake, to a slight, weary figure that came stumbling along it.

HAWK CARSE had come as he said he would, but he was a gore figure of a man. Though he was not in it now, for days he had worn the harsh, grating metal and fabric of a space-suit, and its marks were left on him. Even from a distance the others could see that his once-neat blue trousers and soft flannel shirt were torn through in many places, revealing ugly purplish bruises; on his haggard face was a nap of flaxen beard, and in his blood-shot gray eyes utter exhaustion, both mental and physical. The Hawk had been acting at high tension for days past, and now the reaction was exacting its inevitable toll.

He came stumbling heavily along the beach, his feet dragging through its coarse sand, and it seemed as if he would drop any moment. With a slight smile he greeted Friday, then Eliot Leithgow and Wilson, all running down

"Hello, Eclipse," he murmured. "and Eliot—and Ban—"

There he wavered and half fell against the Negro's body. Friday wished to carry him, but he would have none of it; by himself he walked up to the ranch-house, where he slumped into a chair while Ban Wilson went shouting into the galley for a mug of hot alkite.

After draining it, Carse revived slightly. Again aware of the three men grouped around him, and recognizing their eagerness for his news, he forced himself to speech.

"Sleepy—must sleep. But—yes—some things I'll tell you." In quick, staccato sentences, his tired eyelids shut half the time, he sketched his adventure at Lar Tantril's ranch, explaining how, even though captured, he had destroyed the figures telling of the location of Leithgow's laboratory; and a slight smile appeared on his lips as he told of the ruse by which he had escaped. "Got away. Told them the lake-front was very dangerous to them. Made them let me show them. I walked out—dozens of them round me, guns on me—walked out till I went under water. Could do it in the suit. I walked under water half a mile or so, then came up and cached the suit. I guess they're still watching! Easy!"

He chuckled, and then, after a short pause went on:

"But here's what's important—Ku Sui is alive. Yes, I know it. He has an assignation with Tantril at Tantril's ranch in five days. And the coordinated brains I promised to destroy—they still exist. So, Eliot, these are orders: prepare plans for infra-red and ultra-violet devices—they ought to do it—so we can see Dr. Ku's invisible asteroid when it comes. Friday, you go down and get my space-suit it's cached ten miles down the beach, beneath a big watsari tree. And then—" His head slumped over; he appeared to have abruptly fallen to sleep.

"Yes, Carse? What is your plan?" Eliot Leithgow asked softly. But the Hawk was only making a great last effort to gather the threads of his idea.

"Yes," he responded, "the plan. Ban stations a man to keep watch on Tantril's ranch, while we go back to your laboratory, Eliot, where you'll make the devices and repair the gravity-plates of my suit. Then, four nights from now, if the watcher's seen no one arrive, Ban, Friday and I return and lie in ambush round Tantril's ranch. Awaiting Dr. Ku. When he comes, he'll surely leave his asteroid somewhere near. And while he's at Tantril's, we capture the asteroid—and my promise to the coordinated brains will be kept.

"Then—but that's enough for now: I am so tired. Ban, will you please—some food—"

Wilson, who had been listening eagerly and, at the end, grinning in prospect of action with the Hawk, darted off like a spark. A few minutes later, after his third mouthful of food, Carse murmured:

"We'll use your ship to go to Eliot's lab in, Ban, but I think you'll—have to—carry me—aboard. So sleepy. Wake me when we get to—lab."

On this last word his sleep-denied body had its way, and at once he was deep in the dreamless slumber of exhaustion.

While he slept, the others rapidly carried out his orders. Within two hours Friday, in the ranch's air-car, had retrieved the cached suit, Ban Wilson had manned and made ready his personal space-ship for the trip to the laboratory, and Eliot Leithgow had jotted down a few preliminary plans for the infra-red and ultra-violet instruments

which Carse would need in order to see the invisible asteroid of Dr. Ku Sui.

CHAPTER II

Three Figures in the Dawn

THE fourth night after the Hawk had met his friends at Ban Wilson's was sunless and Jupiter-less, nor was there the slightest breath of wind: and in the humid dank jungle surrounding on three sides the iswan ranch of the Venusian Lar Tantril the sounds of night-prowling animals burst full and loud, making an almost continuous babel of varied and savage noise.

In the midst of this dark inferno, Tantril's ranch was an island of stillness. Within the high guarding fence, the long low buildings lay quiet and unlighted, brushed periodically by the light from the watch-beacon high overhead as it swept its shaft over the jungle another and then around over the black glassy surface of the Great Briney Lake, bordering the ranch enclosure on the fourth side. And, vigilantly, the eyes of three Venusian guards followed the ray.

They stood on the three lookout towers which reared at equal intervals up above the circumference of the ranch; and though the buildings below seemed deserted, in reality wide-awake men were stationed at posts within them, waiting for the clang of the alarm which the pressing of a button in any one of the lookout towers would effect. Lar Tantril's ranch was not asleep. It was as alert and wary as the beasts tracking through the jungle outside its fence, and all its defensive and offensive weapons were at the ready.

No one within the ranch knew it, but within two hundred yards lay the foe Lar Tantril and his men feared most.

REGULARLY around the watch-beacon swept, slicing the blackness with an oval white finger, the farthest edge of which reached a hundred and fifty yards. Over the "western" lake—and its inky ripples sparkled somehow ominously. Over the jungle's confusion—and trees, great bushes, spiky vines and creeper-growths leaped into momentary visibility, and then were again swallowed up in the tide of night. Here a cutlas-beaked bird, spotlighted for an instant, froze into surprised immobility with the pasty, bloated worm it had seized twisting and dangling from its mouth, to flap squawking away as the ray glided on; there the coils of a seekan, in ambush on a tree limb, glittered crimson for the sudden moment of illumination; or a nameless huge-eyed pantherlike creature was glimpsed as it clawed at a nest of unfledged haris, while the frantic, screaming mother beat at it with wings and claws.

But all this was usual and unalarming, merely the ordinary routine of the jungle at night. Could the beacon have reached out another fifty yards, the guards on their towers would have seen that which was not usual—and would have summoned every weapon of the ranch beneath.

Or could the guards have heard, besides the cries and crashings and yowls of the jungle folk, the man-made sounds which sped silently back and forth across the ranch within their tight and secret radio beams—then, too, the alarm would have clanged.

Had the beacon suddenly stretched its path outward another fifty yards, it would have fallen upon a massive, leafy watzari tree, taller than most; and the guards, looking close, might have caught in one notch of the tree's many limbs a glint of metal: might have seen, had the light held on that

glint, a bloated monster of metal and fabric braced there, hiding behind a screen of leaves.

This giant, not native to the jungle, was posted due "north" from the ranch. Another waited to the "south," in a similarly large tree; and another to the "east."

Hawk Carse and his friends were abroad again, and waiting to strike.

BAN WILSON, hot, itching and uncomfortable inside the heavy space-suit that he wore, and supremely aware of his consequent awkwardness, watched the ranch's beacon sweeping past him thirty or more yards away, and again sought relief from the tedium in conversation.

"Jupiter should be rising soon, Carse. It's the darkest hour—seems to me he'll come now if he comes at all. What do you think?"

He was the one posted in a watari tree "south" of Tantril's ranch. Flung on the tight beam of his helmet-radio, which had been tuned and adjusted by Eliot Leithgow so as to reach only two other radios, the words rang simultaneously in the receivers of Friday, who was "east" of the ranch, and Carse, who was "north."

The Hawk responded curtly:

"I don't know when he'll come; I suspect not before full morning."

Ban Wilson grunted at receipt of this discouraging opinion, and then once more, as he had been doing regularly all through the night, raised to his eyes the instrument that hung by a cord from the neckpiece of the suit. Through it he scanned slowly and methodically the portion of black heaven that had been assigned to him. The instrument would have resembled a bulky pair of electro-binoculars with its twin tubes and eyepieces, had not there been, underneath the tubes, a small, compact box which by Leithgow-magic revealed the world through infra-red light by one tube, and ultra-violet the other.

"Nothing!" Ban muttered to himself, lowering the device. "And damn Ku Sui for makin' these space-suits so infernally uncomfortable! Might as well have made 'em space-ships, while he was at it!... Say, Carse," he began again aloud into his microphone, "maybe Dr. Ku's come already. I know my men said no one had arrived at the ranch in a suit like these we've got on—but, hell, if his whole asteroid's invisible, why couldn't he make his space-suit invisible, too?"

"I don't think he's done that. Otherwise he would have—" The adventurer's level tone raised incisively. "Now, both of you, still! Conceal yourselves with great care —Jupiter's rising!"

THE "western" horizon, a moment before indistinguishable, was now faintly flushed, a flush which deepened quickly into glowing, riotous crimson, causing long streamers to shoot out over the surface of the Great Briney, tingling it, sparkling it. The light reached the jungle; and when the first faint reflected rays filtered down through the matted gloom of tree and vine and bush the creatures that had tracked for prey all night looked to their lairs; and gradually, the tenor of the jungle noises waned off into a few last screams and muttered growls, and then died altogether into the heavy, brooding hush that comes always with dawn over the jungles of Satellite III.

Jupiter thrust his flaming arch upwards over the horizon, and climbed with his whole vast blood-blotched bulk into a sky turned suddenly blue. Lake and jungle shimmered under the rapidly dissipating night vapors. The ranch-beacon paled into unimportance. Day had come.

And now the three bloated figures of metal and fabric that were men crouched closely back beneath the leaves of the trees that concealed them, and waited tensely, not daring at first to move for fear of discovery. Each one could see, through the intervening growth, the watch-towers of the ranch; but Friday, from his post in the tree to the "east," could see the area best, and it was Friday to whom Carse's next words were addressed.

"Eclipse?" his terse voice asked. "Do the guards in the towers seem to notice anything?"

The big Negro strained cautiously for a better view.

"No, suh, Cap'n Carse. Sure they can't see us at all. Just pacin' round on their towers, kind of fidgety."

"Anyone else in sight?"

"No, suh.... Oh, now there's somethin'. Two of the guards are looking below, cupping their ears. Someone down there must be tellin' them somethin'. Now they're lookin' up to the sky—the northern sky. Yes, suh! All three of 'em! They're expectin' someone, sure enough!"

"Good. He must be coming. Use your glasses."

THEN in all three trees the instruments that Eliot Leithgow had shaped were raised, and the whole sweep of horizon and the glowing, clear blue dome of sky subjected to minute inspection through their detecting infra-red and ultra-violet. Ban Wilson, perhaps, stared most eagerly, for he had never seen Ku Sui's asteroid, and despite himself still only half-believed that twenty craggy, twisted miles of rock could be swung as its master willed in space, and brought down bodily to Satellite III.

But he saw nothing in the sky; nothing looming gigantically over any part of the horizon; and he reported disgustedly:

"Nothing doing anywhere, Carse."

"Don't see nothing either, suh," the Negro's deep voice added. And both of them heard the Hawk murmur:

"Nor do I. But he must be— Ah! There! Careful! They're coming!"

"Where? Where is it?" yapped Ban excitedly, jerking the instrument to his eyes again.

"Speak low. Not the asteroid. Three men."

For a tense minute there was silence between them, until, in a low, crisp voice, the Hawk added:

"Three men in space-suits like ours, coming from the 'north' straight for Tantril's. Ban, you may not be able to see them till they get to the ranch, so you keep hunting for the asteroid with your glasses. Friday, you see them?"

"Yes, suh! Three! One ahead of the others!"

"Keep your eyes tight on them. No talking now from either of you unless it's important."

The steely voice snapped off. And carefully, in his tree, Hawk Carse brushed aside a fringe of leaves and concentrated on the three figures the dawn had brought.

HARD and sharp they glittered in the flood of ruddy light from Jupiter, great grotesque figures of metal and bulging fabric, with shining quartzite face-plates and the abnormally large helmets and boot-pieces which identified them as being of the enemy. At a level fifty feet above the jungle's crown they came in fast, horizontal transit, and there was much of beauty in the picture that they made—sparkling shapes flying without sound or movement of limb against the blue sky, over the heaped colors of the jungle below. One flew slightly in the lead, and he, the watching Hawk felt positive, was Ku Sui, and the other two his servants—probably men

whose brains had been violated, dehumanized—mere machines in human form.

Straight in the three figures flew, without hesitation or swerving, closer and closer to the watching man in the tree. The Hawk's lips compressed as his old enemy neared, and into his watching gray eyes came the deadly cold emotionless look that was known and feared throughout space, wherever outlaws walked or flew. Ku Sui—so close! There, in that even-gliding figure, was the author of the infamy done to Leithgow, of the crime to the brains that lived though their bodies were dead; of the organized isuan trade. Go for him now? The thought flashed temptingly through Carse's head, but he saw sense at once. Far too dangerous, with the powerful, watching ranch so close. He could not jeopardize the success of his promise to the brains.

And so Dr. Ku Sui passed, while two pairs of eyes from two leafy trees watched closely every instant of his passing, and one man's hand dropped unconsciously to the butt of a raygun.

Quickly, the Eurasian and his servitors were gone, their straight, steady flight obscured by the trees around Tantril's ranch, below which they slanted.

Dr. Ku Sui had arrived at his assignation. But where was the asteroid?

THROUGH his instrument, Carse sought horizon and heaven for the massive body, but in vain. He spoke into his helmet-radio's mike.

"Ban?"

"Yes, Carse?"

"See the asteroid anywhere?"

"Nowhere, by Betelgeuse! I've looked till my eyes—"

The Hawk cut him short. "All right. Stand by, Friday?"

"Yes, suh?"

"Can you see anything special?"

"No, suh—only that the three platform guards keep lookin' down towards the center of the ranch."

"Good. That means Ku Sui's being received," said Carse; and then he considered swiftly for a minute. Decided, he continued:

"Ban and Friday, you both wait where you are, keeping a steady lookout. None of us can see the asteroid, but it must be somewhere comparatively near, for Dr. Ku has no reason to bother with a long journey in a space-suit. I think the asteroid's close down, hidden by that distant ridge in the direction from which they came. I'm going to find it. When I do, I'll tell you where to come meet me. Inform me at once if Ku Sui leaves or if anything unusual happens. Understood?"

The assenting voices rang back to him simultaneously.

"Right!" he said; and slowly his great bulging figure lifted.

CAUTIOUSLY the adventurer made through the watsari tree to the side facing away from the ranch. There, poising for a second, he manipulated the lateral direction-rod on the suit's chest, and, still very slowly, floated free from the shrouding leaves. Then, mindful of the lookouts on the towers behind, he employed the tactics he had used before, and kept constantly below the uneven crown of the jungle, gliding at an easy rate through the leafy lanes created by the banked tree-tops.

In that fashion, in the upthrust arms of the jungle, twisting, turning, sometimes doubling, but following always a path the objective of which was straight ahead, Hawk Carse soared soundlessly for miles. He maneuvered his way with practised ease, and his speed increased as the need for hiding his flight decreased.

He was familiar with the landmarks of the region, and it was towards the most pronounced of them that he flew. Soon it was looming far above him: a long, high ridge, rearing more than three miles above the level of the Great Briney, and crowded with trees even taller and sturdier than those of the lower jungle plains. Beyond it was the most likely spot....

The Hawk paused at the base of the ridge. There had been no warning from Ban or Friday, but, to make sure, he established radio connection.

"Friday?" he asked into the microphone. "Any activity on the ranch? Any sign they're aware of our presence?"

Clear and deep from miles behind, the Negro's voice answered:

"No, suh. Dead still. I guess they're inside the buildings—except the guards, and they're taking things easy. Where are you, suh?"

"About ten miles from you, 'north' and a little 'east,' at the foot of the ridge. I think I'll know something soon now. Stand by."

Then Carse moved forward again, slowly winding up between the trees to the summit of the ridge.

At the top he stopped. His eyes took in a long, wide valley, of which the ridge where he hung was the southernmost barrier. He knew at once something was wrong. Through his opened face-plate he was aware of a breathless hush that hovered over the valley, a hush which embraced its fifty miles or more of jungle length, a hush which was rendered actually visible in several places by the unmoving, limp-hanging leaves of the trees. Below, in the valley, all the myriad life of the jungle seemed to have frozen, and only occasionally was the pause of life and sound disturbed by the faint, muffled cry of a bird.

What had wrought the hush? Nothing showed to the naked eye.

From the summit of the ridge, Hawk Carse, lifted Leithgow's glasses to his eyes. And the valley was suddenly changed, and the hush explained. The miracle lay before him.

CHAPTER III

The Raid

A DIM, shimmering outline through the infra-red, the valley lay revealed as a great natural cradle for a mammoth body of rock which had been swung down from the deeps of space to the surface of Satellite III.

Titantic, breathtaking in its majesty of sheer bulk, the asteroid of Dr. Ku Sui was made visible.

It hung suspended, low over the tree-tops of the valley, and it filled the valley with rock and towered above it. This was the asteroid, exploded into a separate entity by the cataclysm that gave birth to the planets, which Dr. Ku Sui had wrenched from the asteroidal belt between Mars and Jupiter and built into a world of his own, swinging it through space as he willed, and cloaking it with invisibility to baffle those who marveled at how he came and went, unseen, on his various errands. This was the mighty rock fortress in which lay the keystone of his mounting power. This his lonely, unsuspected home, come for a while to rest....

Hawk Carse scanned it closely.

It lay roughly head-on to him, its nearest massive, craggy end lying some three miles from where he hung. On that end lived the life of the asteroid, and were located all Ku Sui's works. On a space planed flat in the rock, rested the dome, like an inverted quarter-mile-wide bowl of glittering glasslike substance, laced inside with spidery supporting struts—the half bubble from inside which men guided the

mass. Therein an artificial atmosphere was maintained, even as on any space-ship, and there lay the group of buildings, chief of which was the precious laboratory in which were the coordinated brains to whom the Hawk had made his promise.

Carse lowered the glasses, and again the Jupiter-light poured normally around him, the valley hushed and seemingly empty once more. He put through his call to Friday and Ban, giving them simple directions how to find him. And twenty-five minutes after that, he saw, looking back down the ridge, their two giant metallic figures come twisting and turning in noiseless flight through the top lanes of the jungle below, and they were together.

IT was seldom that Friday would intrude his thoughts when with his master and his master's friends, so when he arrived he merely surveyed the asteroid through his glasses and was silent. But Ban Wilson, after a long, comprehensive stare, during which one could almost feel the amazement leaping through him, sputtered:

"By jumping Jupiter, Carse—I never would've believed it! That Ku Sui's sure a genius! To have that whole asteroid there, man, and to take it with him wherever he wants to go! Look at it! Fifteen, twenty miles long, it must be! And that dome—"

"Yes," said the Hawk shortly, "but easy on that now. We've work to do, and it's got to be done quickly. Now listen:

"There are two main port-locks in the dome for space-ships, and the starboard one has a smaller man-size lock beside it. We're going to the smaller one. There'll no doubt be a guard on watch at it, so to him we're Ku Sui and the two men who accompanied him. We'll have to chance recognition; but at least there's no difference in the suits we're wearing, and we'll clasp our glasses on all the way to the lock, for surely Dr. Ku has to use some similar device. Keep your faces averted as much as you can though, when near, and your ray-guns in your belts. If there's to be gunplay, leave the first shot to me. You'll both follow me just as those two followed Dr. Ku."

Ban Wilson asked: "Will you go down into the valley between the trees, then up the face of the rock? The guard wouldn't see us until we were right at the lock."

"No, he wouldn't; but he'd wonder why Ku Sui was being so cautious. We'll go straight across, in full view. We'll get in easily, or—well, that depends. Ready?"

They fastened the glasses over their eyes, keeping the helmet face-plates partly open. The ray-guns they eased in their belt holsters, and slid back the hinged palms of their mittens, to give exit if need be to their gun-hands. They were ready.

Switching on the helmet gravity-plates to swift repulsion, the three soared out of the trees, soared up on a straight, inclined line for the dome on the asteroid, a steady, rapid climb that soon raised them one mile, a second and a third, where they leveled off and sped straight ahead. Now they could look right into the dome.

Rapidly the port-lock that was their objective grew in size. Behind it were the buildings: the large, four-winged central structure and the supplementary workshops and hangars, coolie-quarters and outhouses, all dim and shimmering through the infra-red—the mysterious, lonely citadel of Dr. Ku Sui. There it all was,-inside the dome, with the rest of the asteroid looming massive behind.

A quarter-mile away, and swiftly

half that, and half again, the three grouped figures arrowed ahead without hesitation. And the Hawk said curtly:

"I see no men—do either of you? It looks deserted."

"There!" cried Ban, after a second. "There! Beside the port-lock. Just now!"

BESIDE the smaller port-lock's inner door a figure had appeared, clad in the neat yellow smock of a servitor of Ku Sui. It was a smooth, impassive Oriental face that turned to stare out at the approaching men; and even Ban knew that this sentinel stationed at the lock was one of the coolies whose brains Dr. Ku had altered, turning him into a mechanicalized man who obeyed no orders but his. He watched closely the three who swept on towards him, his hand at a raygun in his belt. The same questions were in the minds of all three of the raiders. Would he recognize something as being different, or suspicious? Would he summon others of his kind from the small guard-box he had come out of?

But the coolie evinced no alarm. It would have been difficult for anyone to have discerned distinguishing features inside the cumbersome helmets, behind the instruments clamped to the faces of the men who wore the suits. He called no others, but merely watched.

Soon the opaque metal plates of the small lock's outer door had neared to within a few feet of Hawk Carse, and he stopped short. Ban and Friday following suit. They hovered there outside the door, gently swaying like flies against the great gleaming sweep of the dome, the craggy rock face dropping sickeningly down for miles beneath them. And, like flies, they were powerless to open the door to gain entrance. Only the coolie inside could do that; and he, through the dome to one side, was peering at them.

Apparently he was satisfied with his scrutiny. After a moment, bolts shifted and the door stirred and swung out, revealing the all-metal atmosphere chamber and the inner door at the far side. Immediately Carse floated into the chamber, and the two others pressed in behind. They saw the outer door swing shut, and heard its locks thud over.

They were sealed from sight inside the port-lock's atmosphere chamber.

"Looks to me," whispered Ban Wilson, "like a very sweet trap. If that fellow inside wants to—"

The Hawk's cool voice cut him off.

"We can take off the glasses now," he said casually. "Keep alert."

And for a full minute they waited.

AT length a circle of light showed around the rim of the inner door, and it grew quickly into the full flood of Jupiter-light as the door opened.

Carse floated through, no longer attempting to avert his face.

The coolie, standing just outside the chamber, saw the adventurer's features and remembered—and drew the raygun in his belt.

Carse did not shoot. He never killed unless he could not avoid it; this was as much a part of his creed as his remorseless leveling of a blood-debt. He struck with the suit. Under a quick turn of the control, the great heavy bulk of fabric-joined metal lunged forward. The move was quick, but not quite quick enough, for just before the coolie was bowled headlong to the ground, he got out a high-pitched warning yell; and then, as he lay sprawled out, apparently uncon-

scious, a thin hot orange streak sizzled by Hawk Carse's helmet from the left.

This time Carse shot. His gun leaped from belt to hand, and had twice spoken from the hip before one could quite grasp what had happened. Seemingly without bothering to take aim, his deadly left hand had stricken into lifeless heaps two coolies who had come running and shooting from the nearby guard-box.

As Carse stood looking down at their bodies he was startled by another sizzling spit. He wheeled to see Friday holding the raygun that had spoken.

The Negro said apologetically:

"Sorry, sub—I had to. The other coolie, the one you knocked down, came to and was aimin' at you. Guess they're all three dead now, sure enough."

HIS master nodded, and said in a low, thoughtful voice: "In spite of what some men have said, I never like to kill; but for these robots, more machines than men, with nothing human to live for, it's release rather than death.

"Well," he began again, more briskly, "we're inside, and whoever else is here apparently doesn't know it yet. I expected more of a commotion. I wonder how many coolies Ku Sui had, altogether? Fourteen or fifteen were killed when we broke through the dome, before, and now these three. There surely can't be many left. Of course, there are the four white men, his surgical assistants."

Ban Wilson spoke after what was for him a long silence. He had watched the Hawk's gunplay with an awe-stricken face; its speed never failed to amaze him. He observed:

"These buildings certainly look lifeless. Well, what now, Carse?"

"A search." He planned it out in his head, then gave quick orders. "Ban," he directed, "you go through all the outbuildings, your gun ready. The five main ones are a workshop, a power-house, storehouse, a ship hangar and a barracks for coolies. Whoever you find, take prisoner. Keep in touch with me by radio."

"Friday," he continued, "I'm leaving you here. First get these bodies in that guard-house they came out of. Then keep sharp watch. I don't think Ku Sui will return within fifteen minutes, but we must take no chance. At the first sign of him, warn me."

"Yes, suh. But what are you goin' to do?"

"Take over the central building," said the Hawk. "And then, when the whole place has been reconnoitered, fulfil my promise to the brains."

"And what about Ku Sui?"

"Later," he said. "It should not be hard to take him prisoner.... Now, enough!"

The three parted.

CHAPTER IV

The Voice of the Brains

THE central structure of the group of buildings was shaped like a great plus-mark, each of its four wings of identical square construction, with long smooth metal sides and top, and with a door at the end giving entrance to a corridor that ran straight through to the chief central laboratory of Dr. Ku Sui.

Carse skimmed swiftly, two feet off the glittering metallic soil, towards the end of the nearest wing, where he gently landed. He tried the door giving entrance. It was open. He cautiously floated through into complete darkness.

The Hawk was prepared for that. He drew a hand-flash from the belt of his suit, and, standing motion-

less, his raygun ready in his left hand, he probed the darkness with a long white beam. Spaced evenly along the sides of the corridor were many identical doors, and at the end a larger, heavier door which gave entrance to the central laboratory. He found no life or anything that moved at all, so, methodically, he set about inspecting the side rooms.

The doors were all unlocked, and he moved down the line without alarm, like a mechanical giant preceded by a sweeping, nervous flow of light. Such he might from the outside have appeared to be, but the man within himself was more like a cat scenting for danger, all muscles and senses delicately tuned to alertness. Door by door, a cautious and thorough inspection; but he found nothing of danger. All the rooms of that wing were used merely for stores and equipment, and they were quite silent and deserted. When he came at last to its end, Carse knew that the wing was safe.

He paused a minute before the laboratory door. He had expected to find it locked, and that he would have to seek other means of entrance; but it was not. By pushing softly against it, it easily gave inward on silent well-oiled hinges. He entered.

CARSE found himself in a place of memories, and they were sharp and painful in his brain as he stood there. Here so much had happened; here death, and even more than death, had been, and was, so near!

The high-walled circular room was dimly lit by daylight tubes from above. The damage he, Carse, had wrought when besieged in it, a week before, had all been repaired. The place was deserted—it seemed even desolate—but in Carse's moment of memory it was peopled. There had been the tall, graceful shape in black silk; there the operating table and the frail old man bound on it; there the four other men, white men and gowned in the smocks of surgeons, but whose faces were lifeless and expressionless Dr. Ku Sui and his four assistant surgeons and his intended victim, Master Scientist Eliot Leithgow....

They were all gone from the room now, but there was in it one thing of life that had been there before. It lay behind the inlaid screen which, standing on roller-legs, lay along the wall at one place. The Hawk did not look behind the screen. He could see under it, to know that no one lurked there. He knew what it was meant to conceal. There his promise lay.

But his promise could not be fulfilled immediately. There were four wings to the building, four doors leading into the laboratory, and he had inspected but one.

An open door to his right revealed a corridor similar to the one he had reconnoitered. He repeated down it his methodical search and found no one. Then he returned to the laboratory.

Surely there were men somewhere! Surely someone was behind one of the two closed doors remaining! Gun and flashlight still at the ready, Carse listened a moment at the nearest one.

Silence. He grasped the knob, turned it and quickly threw the door open. A rapid glance revealed no one. Wary and alert, he passed through, and discovered that in this wing were the personal living quarters of Dr. Ku Sui.

The quarters were divided into five rooms: living room, bedroom, library, dining room and kitchen, and the huge metal figure passed through all five, the cold gray eyes taking in every detail of the comfortable but not luxurious furnish-

ings. There was a great deal of interest to him, but it would have to wait.

He reentered the laboratory and went to the remaining door. Bending his head he again listened. A sound—a faint whisper? He fancied he heard something.

Ready for whatever it was, Carse pulled the door wide. And before him he saw the control room of the asteroid, and the men for whom he had been hunting.

THEY were white men. Carse recognized them immediately as the four assistants of Dr. Ku Sui. Once they had been eminent on Earth, respected doctors of medicine and brain surgery, leaders in their profession; now they were like the mechanicalized coolies. For their brains, too, the Eurasian had altered, divested of all humanity and individuality, so as to utilize unhampered their skill with medicine and scalpel.

They were clad in soft yellow robes and seated at ease at one end of a room crowded with a bewildering profusion of gauges, machines, instruments, screens, wheels, levers, and other nameless controlling devices. They did not show surprise at the huge clumsy figure that stood suddenly before them, a ray-gun in one hand. Like the coolies, their clean-cut features did not change under emotion. All they did was rise silently, as one, gazing at the adventurer out of blank eyes, saying nothing, and making no other move.

Carse tried simple measures in dealing with them. His voice gentle yet firm, he said:

"You must not try to obstruct me. You have seen me before under unfortunate conditions, yet I want you to know that I am really your friend. I mean you no harm; but you must realize that I have a gun, and believe that I will not hesitate to use it if you resist me. So please do not. I only want you to come with me. Will you?"

They were simple words, and what he asked was simple, but would the meaning reach these violated brains? Or would there instead be the desperate reaction of the coolies, who had tried to kill him? Carse waited with genuine anxiety. It would be hard to shoot them, and he knew he could not shoot to kill.

A moment of indecision—and then with relief he saw all four, with apparent willingness, move forward towards him. He directed them through the laboratory and, without sign of resistance, herded them down the corridor he had first searched to the outside.

THE light of Jupiter, flooding undiminished through the dome, dazzled him at first. When he could see clearly, he distinguished the great form that was Friday standing motionless by the small port-lock, and, an equal distance away, moving around one of the out-buildings, another similar figure. He spoke by radio.

"Find any, 'Ban?"

Cheerful words came humming back.

"Only one coolie, Carse. Had no trouble after I disarmed him. He's now locked inside a room in this building. Safe place for prisoners."

"Good," said Carse. "You can see I've got four men—white men. I believe they're unarmed and quite harmless, but I want you to take them, search them and put them away in that room, too."

"Coming!"

The distant form rose lightly, skimmed low over the open area between, and grew into the grinning, freckle-faced Ban Wilson. He bounced down awkwardly, almost losing his balance, then surveyed, wonderingly, the four assistants of Ku Sui.

"By Betelgeuse!" he muttered. "—like robots! Horrible!"

"Yes," said the Hawk shortly. "You had no trouble, eh?"

Ban grinned again. "Nothing to mention. This has been soft, hasn't it?"

"Don't be too optimistic, Ban. All right—when you've put these men in the room, please relieve Friday. Send him to me in the laboratory—he knows where it is—and stand watch yourself. If Ku Sui appears—"

"I'll let you know on the instant!"

Hawk Carse nodded and turned back into the corridor from which he had just come. Now he would fulfil his promise. With no possibility of a surprise attack from anyone within the dome, and Ban Wilson posted against the return of Ku Sui, he could attend unhampered to the vow which had brought him there.

HE returned to the central laboratory. Quickly he rolled back the high screen lying across one part of the curved wall and stood looking at what was behind it. The monstrousness of that dead-and-alive mechanism overwhelmed his thoughts again.

Before him stood a case, transparent, hard and crystal-like, as long as a man's body and half as deep, standing level on short metal legs. What it contained was the most jealously guarded, the most precious of all Dr. Ku Sui's works, the very consummation of his mighty genius, his treasure-house of wisdom as profound as man then could know. And more: it held the consummation of all that was so coldly unhuman in the Eurasian. For there, in that case, he had bound to his will the brains of five of Earth's greatest scientists, and kept them alive, with their whole matured store of knowledge subservient to his need, although their bodies were long since dead and decayed.

For some time the adventurer stood lost in a mood of thoughts and emotions rare to him—until he was startled back into reality by a heavy, clumping noise coming down the corridor through which he had entered. His gun-hand flickered to readiness, but it was only Friday, coming as he had been ordered. Carse greeted the Negro with a nod, and said briefly:

"There's a panel in this room—over there somewhere—you remember—the place through which Ku Sui escaped when we were here before. It's an unknown quantity so I want you to stand watch by it. Open your face-plate wide, and warn me at the slightest sound or sight of possible danger."

The Negro nodded and moved as silently as was possible in his space-suit to obey. And Carse turned again to the thing to which he had made a promise.

THE icy-glittering case was full of a colorless liquid in which were grouped, at the bottom, several delicate, colored instruments all interconnected by a maze of countless spidery silver wires. Sheathes of other wires ran up from the lower devices to the case's main content—five grayish, convoluted mounds that lay in shallow pans—five brutally naked things that were the brains of scientists once honored and eminent on Earth.

Their bodies had long since been cast aside as useless to the ends of Ku Sui, but the priceless brains had been condemned to live on in an unlit, unseeing, deathless existence: machines serving the man who had trapped them into life in death. Alive—and with stray memories, which Ku Sui could not banish entirely, of Earth, of love, of

the work and the respect that had once been theirs. Alive—with an unnatural and horrible life, without sensation, without hope. Alive—and made to aid with their knowledge the man who had brought them into slavery unspeakable....

Hawk Carse's eyes were frigid gray mists in a graven, expressionless face as he turned to the left of the case and pulled over one of the well-remembered knife switches. A low hum came; a ghost of rosy color diffused through the liquid in the case. The color grew until the whole was glowing jewel-like in the dim-lit laboratory, and the narrow tubes leading into the undersides of the brains were plainly visible. Something within the tubes pulsed at the rate of heart-beats. The stuff of life.

When the color ceased to increase, Carse pulled the second switch, and moved close to the grille inset in a small panel above the case.

Slowly, gently he said into the grille:

"Master Scientist Cram, Professors Estapp and Geinst, Doctors Swanson and Norman—I wish to talk to you. I am Captain Carse, friend of Master Scientist Eliot Leithgow. Some days ago you aided us in our escape from here, and in return I made you a promise. Do you remember?"

There was a pause, a silence so tense it was painful. And then functioned the miracle of Ku Sui's devising. There came from the grille a thin, metallic voice from the living dead.

"*I remember you, Captain Carse, and your promise.*"

A VOICE from living brain cells, through inorganic lungs and throat and tongue! A voice from five brains, speaking, for some obscure reason which even Ku Sui could not explain, in the first person, and setting to mechanical words the living, pulsing thoughts that sped back and forth inside the case and were coordinated into unity by the master brain, which had once been in the body of Master Scientist Cram. A voice out of nothingness; a voice from what seemed so clearly to be the dead. To Hawk Carse, man of action, it was unearthly; it was a miracle the fact of which he could not question, but which he could not hope to understand. And well might it have been unearthly to anyone. Even to-day.

Still thrilling to the wonder of it, he went on:

"I have returned here to the asteroid with friends. Primarily I came to keep my promise to you, but I intend to do more. Dr. Ku Sui is not here now, and will not be for at least fifteen minutes; but when he does return, I am going to capture him. I am going to take him alive."

He was silent for a moment.

"Perhaps you do not know," he continued levelly, "but the people of Earth hold Master Scientist Eliot Leithgow responsible for your disappearance. He is therefore a fugitive, and there is a price on his head. It is my purpose to restore Eliot Leithgow to his old place by returning Dr. Ku to Earth to answer for the crimes he has effected on you.

"I am now ready to fulfil my promise to you. I expect no interruption this time. I regret exceedingly my inability to destroy you when I was here before, but I simply could not in the little time I had. I still do not know how best to go about it. Perhaps you will tell me. I will wait...."

An afterthought came to him. He added into the grille:

"There is no hurry. Your extraordinary position—your thoughts—I understand...."

Then there was a long silence. For once the Hawk was not impatient; in fact there was in him the feeling that the pause was only decent and fitting. For before him were the brains of five great scientists, who as captive remnants of men had asked him to end their cold and lonely bondage. Limbless, his was to be the hand of their self-immolation. The present silent, slow-passing minutes were to be their last of consciousness....

And then at last spoke the voice:

"Captain Carse, I do not wish you to destroy me. I wish you to give me new life. I wish you to transplant me within the bodies of five living men."

THE words, so unexpected, took Hawk Carse by perhaps the greatest surprise he had ever known. For a time he was completely astounded; he could hardly credit his ears. It required a full minute for him to summon even the most halting reply.

"But—but could that be done?" He strove to collect himself, to consider logically this course that he had never dreamed would be requested. "Who could do it? I know of no man."

"Dr. Ku Sui could transplant me."

"Ku Sui? He could, but he wouldn't. He would destroy you, rather."

Almost immediately the artificial voice responded:

"You have said, Captain Carse, that you will soon have Ku Sui captive. Will you not attempt to force him to do as I desire?"

Carse considered the suggestion, but it did not seem remotely possible. Ku Sui could not be prevented from having endless opportunities for destroying the brains while enjoying the manual freedom necessary to perform the operations of re-embodying them.

"I do not see how," he began—and then he cut off his words abruptly.

Something had come into his mind, a memory of something Eliot Leithgow had told him once, long before. Slowly the details came back in full, and at their remembrance his right hand rose to the odd bangs of flaxen hair concealing his forehead and began to smooth them, and a ghost of a smile appeared on his thin lips.

"Perhaps," he murmured. "I think . . . perhaps . . ."

He said decisively into the grille:

"Yes! I think it's quite possible that I can force Ku Sui to transplant you into living bodies! I think—I *think*—I cannot be sure—that it can be done. At least I will make a very good attempt."

The toneless, mechanical voice uttered:

"Captain Carse, you bring me hope. My thoughts are many, and they are grateful."

But the Hawk had made a promise, and had to be formally freed of the duty it entailed.

"You release me, then," he asked, "from my original promise to destroy you?"

"I release you, Captain Carse. And again I thank you."

The adventurer returned the switches motivating the case, and the faint smile returned to his lips at the thought that had come to him.

But the smile vanished suddenly at the quick, excited words that came crackling into his helmet receiver.

"Carse? Carse? Do you hear me?"

He threw over his microphone control.

"Yes, Ban? What is it?"

"Come as fast as you can. Just caught sight of three distant figures flying straight towards here. It's Ku Sui, returning!"

CHAPTER V

"My Congratulations, Captain Carse!"

A FEW minutes later the trap was in readiness.

It had been swiftly planned and executed, and it promised well. Both the inner and outer doors of the smaller port-lock lay ajar. Hawk Carse was gone from view. The only figure visible there was that which lay sprawled face-downward on the ground close to the inner door of the port-lock.

The figure seemed to have been stricken down in sudden death. It was clad in the trim yellow smock of a coolie of Ku Sui. It was limp, its arms and legs spreadeagled, and it lay there as mute evidence that the dome of the asteroid had been attacked.

To one entering from outside, the figure was that of a dead coolie. The coolie that had worn those clothes was dead; his clothes now covered the wiry length of freckle-faced Ban Wilson.

Ban played the game well. His face lay in the ground, pointed away from the lock, so he could not see what was going to happen behind him; but before the Hawk had directed him to take off his suit and don the yellow smock, he had glimpsed, rising swiftly over the southernmost barrier of hills that edged the valley, three black dots coming fast toward the asteroid in straight, disciplined flight, and he knew that the leader of the three was Dr. Ku Sui.

As he lay limp on the ground, playing his important part as the decoy of the trap, he knew that his life depended on the action and the skill and the timing of Hawk Carse. But he did not worry about that. He had implicit faith in the Hawk, and trusted his life to his judgment without a tremor.

Still, it was hard for Ban to throttle down his excessively nervous nature and maintain the dead man pose for the long silent minutes that crawled by before there came any sound from behind. The Jupiter-light, flooding down on him from the glittering blue sky above, was hot and growing hotter, and of course he began to itch. Had he had the freedom of his limbs, he would not have itched, he knew; it happened only when he had to keep absolutely still; he cursed the phenomenon to himself. Minute after minute, and no sound to tell him what was happening behind, or how close the three approaching figures had come, or whether Carse was at all visible or not—and the mounting, maddening itch right in the middle of his back!

AT last Ban's mental cursings stopped. His straining ears had caught a sound.

It was quickly repeated, and again and again—the heavy, grating noise of metal on metal. The boots of space-suits on the metal floor of the port-lock. They had arrived!

Ku Sui would be there, close behind him; probably gazing at his outflung figure; probably puzzled, and suspicious, and quickly looking around for the enemies that had apparently killed one of his coolies. With a ray-gun in hand—and guns in the hands of the two others with him—glancing warily around over the guard-chamber close to the port-lock, and the main buildings beyond, and the whole area inside the dome, and seeing no one.

And then—approaching!

Ban could tell it by the silence, then the harsh crunch of the great boots against the powdered, metallic upper crust of ground. But he lay without an eyelash's flickering, a dead coolie, limp, crumpled. He heard the crunch of boots come right up to him and then pause; and the feeling that came to his

stomach told him unmistakably that a man was looking down on him....

Now—while Ku Sui's attention was on him—now was the time! Now! Otherwise the Eurasian would turn him over and see that he was white!

It seemed to Ban centuries later that he heard the welcome voice of the Hawk bark out:

"You are covered, Dr. Ku! And your men. I advise you not to move. Tell your men to drop their guns—*ah!*"

The sound of the voice from the guard-chamber was replaced by two spits of a raygun. Unable to restrain himself, Ban rolled over and looked up.

He saw, first, the figure of the Hawk. Carse had stepped out from where he had been concealed, in the guard-chamber, and was holding the gun that had just spoken. Standing upright, close to the inner door of the port-lock, were two suit-clad coolies. Ban saw that they had turned to fire at Carse, and that now they were dead. Dead on their feet in the stiff, heavy stuff of their suits.

Dr. Ku Sui was standing motionless above him, and through the open face-plate of the Eurasian's helmet Ban could see him gazing at Hawk Carse with a strange, faint smile on his beautifully chiselled, ascetic face.

The Hawk came towards them, the raygun steady on his old foe; but while he was still yards away, and before he could do anything to prevent it, the Eurasian spoke a few unintelligible words into the microphone of his helmet-radio. Carse continued forward and stopped when a few feet away. Dr. Ku bowed as well as he could in his stiff suit and said courteously, in English:

"So I am trapped. My congratulations, Captain Carse! It was very neatly done."

THE two puffed-out, metal-gleaming figures faced each other for a moment without speaking. And in the silence, Ban Wilson, watchful, with a raygun he had drawn from his belt, fancied he could *feel* the long, bitter, bloody feud between the two, adventurer and scientist, there met again....

Carse spoke first, his voice steel-cold.

"You take it lightly, Dr. Ku. Do not rely too much on those words you spoke in Chinese. I could not understand them—but such things as I do not know about your asteroid I have already guarded against; and I think we can forestall whatever you have set in action.... You will please take off your space-suit."

"Willingly, my friend!"

"Watch close, Ban," said the Hawk.

Dr. Ku Sui unbuckled the heavy clamps of his suit, unscrewed the cumbersome helmet, and in a moment stepped free. As the suit slid to the ground, there stood revealed his tall, slim-waisted form, clad in the customary silk. He wore a high-collared green silk blouse, tailored to the lines of his body, full trousers of the same material, and pointed red slippers and red sash, which set the green off tastefully. A lithe, silky figure; and above the silk the high forehead, the saffron, delicately carved face, the fine black hair. Half-veiled by their long lashes, his exotic eyes rested like a cat's on his old enemy.

The Hawk moved close to him, and swiftly patted one hand over his body. From inside one of the blouse's sleeves he drew a pencil-thin blade of steel from its hidden sheathe. He found no other weapon. Stepping back, he quickly divested himself of his suit also.

"And now, Captain?" the Eurasian murmured softly.

"Now, Dr. Ku," answered Carse, once again a slender, wiry figure in soft blue shirt and blue denim trousers, "we are going to have a little talk. In your living room, I think.

"Baa," he continued, "I don't believe there's anyone else who can even see the asteroid, but we have to be careful. Will you stay on guard here by the port-lock? Good. Close its doors, and yell or come to me if anything should occur."

He turned to the waiting Eurasian again.

"You may go first, Dr. Ku. Into the laboratory, and then to the living room of your quarters."

THEY found Friday on guard where he had been stationed in the laboratory. The big Negro, on recognizing the Eurasian, grinned from ear to ear and gave him what he considered a witty greeting.

"Well, well!" he said with gusto, "—come right in, Dr. Ku Sui! Make yourself at home, suh! Sure glad to have you come visitin' us!" He laughed gleefully.

But his words were wasted on Dr. Ku. His eyes at once fastened on the case of coordinated brains, standing at one side. Carse noticed this.

"No, Dr. Ku," he said. "I have not touched the brains. Not yet. But that's what we're going to talk about." He motioned to one of the four doors connecting the central laboratory with the building's wings. "Into your living room, please, and be seated there. And no sudden moves, of course: I have a certain skill with a raygun. Friday, keep doubly alert now. Better take off your suit. I will call for you in a few minutes."

Ku Sui walked on silent feet into the first division of his personal quarters, the softly-lit living room. A lush velvet carpet made the floor soft; ancient Chinese tapestries hid the pastelled metal of the walls; books were everywhere. It was a quiet and restful room, with no visible reminder of the asteroid and its controlling mechanics.

Dr. Ku sank into a deep armchair, linked his fingers before him and looked up inquiringly.

"We were going to talk about the brains?" he asked.

CARSE had closed the door behind him, and now remained standing. He met the masked green eyes squarely.

"Yes." He was silent for a little, then, quietly and coldly he went to the point.

"You'll be interested to hear that I have talked with the brains and been relieved of my promise to destroy them. They requested something else. Now I have committed myself to attempt their restoration into living bodies."

"So?" murmured the Eurasian. "So. Yes, Captain, that is very interesting."

"Very." The Hawk spoke without trace of emotion. "And some courtroom on Earth will find more than interesting the testimony of your re-embodied brains."

Dr. Ku Sui smiled in answer. "Oh, no doubt. But, my friend—this transplantation—you accept its possibility so casually! Won't it prove rather difficult for you, who have never even pretended to be a scientist?"

"Not difficult. Impossible."

"And Master Scientist Eliot Leithgow— I have unbounded respect for his genius, but brain surgery is a specialty and I really think that this task would be outside even his capabilities. I am sure he himself would admit it."

"You are right, Dr. Ku: he has admitted it. We both realize there is only one person in the universe who could achieve it—you. So you will have to perform the operations."

"Well!" said Dr. Ku Sui. The smooth, fine skin of his brow wrinkled slightly as he gazed up at the intent man facing him. "Is this just stupidity on your part, Captain? Or do you attempt a joke at which in courtesy I should smile?"

The Hawk answered levelly: "I was never farther from joking in my life."

WITH a delicate shrug of his silken shoulders, Ku Sui averted his eyes. As if bored, he glanced around the room. Slowly he unclasped his hands.

"I am a very fast shot, Dr. Ku," whispered Carse. "You must not make a single move without my permission."

At that the Eurasian laughed aloud, a liquid laugh that showed his even teeth between the finely cut lips.

"But I am so completely in your power, Captain Carse!" He held on to the last syllable, a low, sustained hiss—and then he snapped it off.

"*S-s-stab!*" His mood had changed; the smile vanished from a face suddenly thin and cruel; the green eyes unmasked, to show in their depths the tiger.

"What insane talk! You say such things to me! Don't you know that to coordinate those brains I worked for years with a devotion, a concentration, a genius you can never hope even to comprehend? Don't you realize they're the most precious possession of the greatest surgeon and the greatest mind in the universe? Don't you understand that I've fashioned a miracle? Realize these things, then, and marvel at yourself—you who, with your gun and your egotism, think you can make me undo their wonderful coordination!"

The tiger returned behind the veil, its power and fury again leashed, and Dr. Ku Sui relaxed. his green eyes once more masked and enigmatic. Hawk Carse asked simply:

"*Could* you transplant the brains?"

"You insist on continuing this farce?" murmured the Eurasian. "I would not be rude, but really you try my patience!"

"*Could* you transplant the brains?"

Dr. Ku Sui looked at the colorless face with its eyes of ice. With a trace of irritation, he said:

"Of course! What I have once transplanted, I can transplant again. But I will not do it—and my will no one, and no force, can alter. Perhaps it is clear now? In no way can you touch my will. I am sorry that I so grossly insulted you, Carse, for there are certain things about you that in a small way I respect. But here you are helpless."

"Not entirely," said the Hawk.

KU SUI leaned forward a trifle. In that moment, perhaps, he first felt real concern, for Carse's quiet voice was so confident, so assured. He attempted to sound him out.

"A gun?" he asked. "Torture? Threats? These against my will? Absurd! Consider, my friend—even if I seemed to consent to the operations, could I not easily destroy the brains while ostensibly working on them?"

"Of course," said Carse, with a faint smile. "And threats and torture would be absurd. Against your will, Dr. Ku, a more powerful weapon will have to be used."

The Eurasian's eyes were brilliant with intuition.

"Ah—I see," he murmured. "Eliot Leithgow!"

"Yes, Dr. Ku!"

The two gazed at each other, Carse still with the faint smile, the other with the face of a statue. Presently the adventurer went on

"Unfortunately for you, Eliot Leithgow can provide a method of compulsion neither you nor any other man could ever resist. Not guns, torture, threats—no. A subtler weapon, worthy of your fine will."

As he spoke, Carse saw the Eurasian's green eyes narrow, and in the pause that followed he knew that the swift, trained mind behind those eyes was working. What would it evolve? What move? And those Chinese words, uttered out by the port-lock—what would they result in, and when? Dr. Ku Sui was concerned now, the Hawk knew, seriously concerned, and, inevitably, would take serious steps. What was growing in his resourceful brain? He would have to ward off any trouble when it came, for he could not know now. He said curtly:

"But enough of that. Now, I have a trifling favor to ask of you—something concerning the laboratory. Will you please return to it."

A strange light glimmered for an instant in Dr. Ku Sui's eyes—a mocking of the slender man before him. Only for an instant; then it was gone. Gracefully he raised his tall figure.

"The laboratory? Of course, my friend. And as for the favor—almost anything."

CHAPTER VI

The Deadline

FRIDAY greeted them with another wide grin, and would again have bludgeoned the Eurasian with his wit had not the Hawk motioned him to silence. Looking at Dr. Ku, he said:

"I have Friday posted here because of the secret panel somewhere in this wall. You escaped through it before—do you remember?"

"Of course I remember. And if I'd had merely a fraction of your luck then, my present situation would be quite different."

"Perhaps," said the Hawk. "This panel is now the unknown quantity so far as I'm concerned, and I don't like unknown quantities; so I am asking you to show me where it is and how it works. That's my favor. Of course you can refuse to reveal it, but that will not delay me very long. The method of compulsion I mentioned..."

Dr. Ku Sui appeared to reflect a moment, but his decision was not tardy in coming. He smiled.

"You terrify me, Captain, with your ominous hints about compulsion. I suppose I'd better be reasonable and show it to you. Really, though, your concern over the panel is rather wasted, inasmuch as it conceals nothing more than a small escape passage leading out of this building. Nothing important at all."

But his words, Carse somehow felt, were a screen; something else lay beneath them. He watched the tall figure with its always present odor of tsin-tsin blossoms move forward in a few indecisive steps, then back again, considering. The smile and the easy words were a camouflage, surely—but for what?

"Nothing important at all," Dr. Ku Sui repeated pleasantly. "Come, I will show you. Friday—if I may so address you—over on that switchboard you will find a small lever-control. It is the one with a Chinese character above it. Will you be so kind as to throw it?"

The Negro glanced inquiringly at his master. Grimly Carse nodded.

An enigmatic light glimmered in the Eurasian's green eyes as they watched the Negro go to the switchboard and put thumb and forefinger on the control.

"Only a small escape passage," he said deprecatingly as the Hawk crouched, gun ready, his eyes on the suspected place in the wall.

Friday threw the switch.

Immediately there sounded a short, sharp explosion. And acrid smoke billowed out from under the case of coordinated brains!

CARSE sprang to Ku Sui, gripped one arm and cried harshly:

"What have you done?"

"Not I, Captain—your obedient servant, the Black. Please, your fingers—" He removed them from his arm; and then, smiling, he said:

"I am afraid that all your assurance, your threats, are now but so much wasted breath."

"You mean—?"

"Surely, Captain," said Ku Sui, "you must have known I would provide for such an emergency as this. I chose not to risk your darkly-hinted method of compulsion, and so had Friday remove the need for it. The Chinese character above the switch stands for 'Death.'"

Frigidly the Hawk asked: "You've destroyed the brains?"

"I have destroyed the brains." The Eurasian's voice was deep with a strange, unusual tone. "No matter: it was time. I am far, far ahead of that work, great though it was: it has destroyed itself with its inherent, irremediable fault. Yes, far ahead. Next time...." He appeared to lapse into profound and melancholy reflections: seemed to forget entirely the two men by him.

But the Hawk acted.

"We'll see," he said curtly. "Friday, watch the Doctor closely: this trick may be only the first." An intent, grim figure, he strode to the case of coordinated brains, pulled over the first of its two controlling switches, and stood silent while slowly the pulsings of light grew through the inner liquid and very slowly irradiated the five gray, naked mounds that were human brains. The light came to full, and Carse threw over the second switch. He said into the grille:

"I am Captain Carse. I wish to know if you are aware of what has just happened. Do you hear me, and did you feel anything a minute ago?"

SILENCE. Friday, close to the Eurasian and watchful, hung breathless, hoping that words might come from the grille in answer. But the silken figure he watched was there only in body; Dr. Ku's mind was in a far space of his own.

Cold, unhuman words spoke out. "*Yes, Captain Carse, I hear you. I felt the vibrations of the explosion that occurred a minute ago.*"

"Hah!" grunted Friday, immensely relieved. "All bluff, suh! No damage to 'em at all!"

Carse asked quickly into the grille:

"You felt the explosion, but do you know what it meant?—what it did?"

Again a pause: and again the toneless voice:

"*A vital part of the machinery through which I live has been destroyed. I have left only some three hours of life.*"

The Hawk returned to Ku Sui. "Is that true?" he snapped.

"Yes, Captain." The words made a whisper, gentle and melancholy, coming from afar. A man was turning back from the scanning of the long years of one phase of his life. "Three hours is all that is left to them. . . . But there was a fault inherent in such coordinated brains: it is just as well that they are going. . . . Ah, Carse, I am so far ahead of you...but I tell you it is a painful thing to destroy so wonderful a work of my hands...."

Silence filled the laboratory. It was broken by the awful voice of the living dead.

"*I release you from your second promise, Captain Carse. No doubt*

what happened was beyond your control.... I will soon be dead Although there is still nourishment in my liquid. I grow weaker already. I am dying...."

Harshly the Hawk asked a final question into the grille:

"Within what time will you retain the vitality necessary to undergo the initial steps of the transplanting operations? Do you know?"

Dr. Ku raised his head at this, though he seemed only mildly interested in what the reply would be.

"*I think for two of the remaining three hours.*"

"All right!" said Hawk Carse decisively. He threw off the case's switches. "Dr. Ku," he said, "you've only succeeded in accelerating things. Now for speed! Friday, we're taking this asteroid to Eliot Leithgow's laboratory. Go see that the port-lock doors are closed tight, then you and Wilson hurry back here! Fast! Run!"

CHAPTER VII

To the Laboratory

WHEN the Negro returned, panting, with Ban Wilson, it was to discover Carse in the control room of the asteroid. He was studying the multifarious devices and instruments; and they, seeing his face so set in concentration, did not disturb him, but went over to where Dr. Ku Sui sat in a chair and posted themselves behind it.

The apparatus in the control room resembled that of any modern space-ship of its time, except that there were extra pieces of unguessed function. Directly in front of Carse was the directional space-stick above its complicated mechanism; above his eyes was the wide six-part visi-screen, which in space would record the whole "sphere" of the heavens; while to his right was the chief control board, a smooth black surface studed with squads of vari-colored buttons and lights. These were the essentials, familiar to any ship navigator; but they were here awesome, for they controlled not the one or two hundred feet of an ordinary craft, but twenty miles of this space-ship of rock.

"Yes . . . yes . . ." Carse murmured presently out of his study, then turned and for the first time appeared to notice Friday and Ban. He gave orders

"Eclipse, you see the radio over there? Get Master Leithgow on it for me—protected beam. Ban, you bind Dr. Ku Sui in that chair, please."

Wilson was surprised.

"Bind him? Isn't he going to run this thing?"

"No."

"You're going to, Carse?"

"Yes. I don't quite trust Dr. Ku. The asteroid's controlled on the same principles as a space-ship; I'll manage. Please hurry, Ban."

"Cap'n, suh! Already got the Master Scientist!" called Friday from the radio panel. The Hawk strode swiftly to it and clamped the individual receivers over his ears.

"M.S.?" he asked into the microphone. "You're there?"

"Yes, Carse? What's happened?"

"All's well, but I'm in a tremendous hurry; I've only got time, now, to tell you we're on the asteroid with Dr. Ku prisoner, and that I'm undertaking to transplant the coordinated brains into living human bodies. . . . What? Yes transplant them! Please, M.S.—not now; questions later. I'm calling primarily to learn whether you have any V-27 on hand?"

Eliot Leithgow, in his distant laboratory, paused before replying. When his voice sounded in the receivers again, it was excited.

"I think I see, Carse! Good! Yes, I have a little—"

"We'll need a lot," the Hawk cut in tersely. "Will you instruct your assistants to begin preparing as much as they can in the next hour? Yes. And your laboratory—clear it for the operations, and improvise five operating tables. Powerful lights, too, M.S. Yes—yes—right—all accessories. Have someone stand by your radio; I'll radio further details while we're on our way."

"Right, Carse. All understood."

The Hawk remembered something else. "Oh, yes, Eliot—is everything safe in your vicinity?"

"There's a small band of iswanas foraging around somewhere in the neighborhood, but otherwise nothing. They're harmless—"

"But possibly observant," finished Carse. "All right—I'll clear them away before descending to the lab. Until later, Eliot."

CARSE switched off the microphone and turned to catch Friday's shocked expression. Carse looked inquiringly at his dark satellite.

"What's wrong?"

"Lordy, suh," the Negro whispered. "Dr. Ku could hear all you said! He'll know where Master Leithgow's laboratory is!"

The Hawk smiled briefly. "No matter, Eclipse. I'm quite sure the information will avail him nothing. For this ride to the laboratory will be his last ride but one." He turned. "We're starting at once. Ban, you've bound him well?"

"If he can get out of those knots," grinned Wilson, "I'll kiss him on the mouth!"

The Eurasian's nostrils distended. "Then," he said, "I most certainly will not try. But Captain Carse, may I have a cigarro before we start on this journey?"

Carse had gone over to the space-stick and his eyes were on the visi-screen, but he now turned them to his old foe for a moment. "Not just now, Dr. Ku," he said levelly. "For it might be that all but two puffs of it would be wasted. Yes—later—if we survive these next few minutes."

The remark did nothing to ease the tension of their leaving. Ban Wilson could not restrain a question.

"Carse, are you going to risk atmospheric friction all the way to the laboratory?"

"No. Haven't time for that. Up and down—up into space, then down to the lab—high acceleration and deceleration."

He grasped the space-stick, then in neutral, holding the asteroid motionless in the valley. He glanced at the visi-screen again, checked over the main controls and tightened his hand on the stick.

"Ready everyone," he said, and gently moved the stick up and forward.

THERE was, to the men in the control room, little consciousness of power unleashed; only the visi-screen and the bank of positional instruments told what had happened with that first delicate movement of the space-stick. It was an experiment, a feeler. The indicators of the positionals quivered a little and altered, and in the visi-screen the hills of the valley, that a moment before had been quite close and large, had diminished to purple-green mounds below.

Then the accelerating sensations began. Carse had the "feel" of the asteroidal ship and his controlling hand grew bolder. The steady pressure on the space-stick increased, it went up farther and farther, and the whole mighty mass of the asteroid streaked out at a tangent through the atmosphere of Satellite III toward the gulf beyond.

With dangerous acceleration the

gigantic body rose, and from outside there grew a moaning which was quickly a shrieking—a terrible, maddened sound as of a Titan dying in agony—the sound of the cloven atmosphere. Twenty miles of rock were hurled out by the firm hand on the space-stick, and that hand only increased its driving pressure when the screaming of the air died away in the deathless silence of outer space.

In one special visi-screen lay mirrored the craggy back-sketch of the asteroid, half of it clear-cut and hard in Jupiter's flood of light, the other half lost in the encompassing blackness of space. Over this shadowed portion a faint, unearthly glow clung close, the result of the terrific friction of the ascent. In miniature, in the regular screens, was Satellite III, but a distorted miniature, for its half-face appeared concave in shape, and dusted with the haze of its atmosphere.

THE Hawk was visibly relieved. He turned to the silent Ku Sui.

"I must congratulate you, Dr. Ku," he said, "on the operation of the asteroid. It's as smooth as any ship. And now, your cigarro. Ban, have you one?"

Wilson produced a small metal case from which he extracted one of the long black cylinders.

"You will have to put it in my lips, please," murmured Dr. Ku. "Thank you. And a light? Again thanks. Ah..." He drew in the smoke, exhaled a fine stream of it from his delicately carved nostrils. "Good." Then he looked up pleasantly at the Hawk.

"And my congratulations to you, Captain. Not only on your expert maneuvering of my asteroid, but on everything: your resourcefulness, your decision, your caution. I have long admired these qualities in you and the events of to-day, though for me perhaps unfortunate, increase my admiration. My own weak resistance, my attempt to frustrate your plans in connection with the brains—how miserable in comparison! It would seem, Captain, that you cannot fail, and that you will indeed succeed in giving the brains new life, so swiftly do you move. Yes, my congratulations!"

He drew at the cigarro, and the smoke wreathed gently around his ascetic saffron face. A faint, queer glint was visible under the long lashes that half-veiled his eyes as he continued:

"But I have a question, Captain. A mere nothing, but still—"

"Yes, Dr. Ku?"

"The living bodies into which you propose to transplant the brains—where are they?"

Hawk Carse's face was stern and his voice frigid as he answered:

"Fortunately, those bodies are right here on the asteroid."

"Here on the asteroid, Captain? I don't understand. What bodies are here?"

"The bodies of your four white assistants, whom I have safely confined, and one of your robot-coolies, also confined. I did not intend to use these five, but, because you put a premium on time by your attempted destruction of the brains, it cannot be helped."

DR. KU SUI'S impassive demeanor did not change. He did not seem in the least surprised. He puffed quietly at the cigarro and nodded.

"Of course, of course. You have five bodies right here on the asteroid. Yes."

"At least," continued Carse levelly, "I do not regret having to use the bodies of your men. They are no longer human: they are not men; they are in effect but machines of your making, Dr. Ku."

"Quite. Quite."

"I suppose you find it an unpleasant thought, to have to be the means of re-making them into whole, normal human beings?"

"On the contrary," breathed the Eurasian, "you inspire a very pleasant thought in my brain, Captain Carse—though I must confess it is not exactly the thought you mention." A smile, veiled by the smoke of the cigarro, appeared on his lips.

The Hawk looked at him closely; the words had a hidden meaning, and it was clear he was not intended to miss the implied threat. But what was Ku Sui's thought? Back in his mind an anxiety grew, indefinite, vague and devilish.

And that vague anxiety was still with him when, fifty-seven minutes later, the asteroid returned from its inverted U-flight, slowed in its hurtling drop from space and hovered directly over the secret, hidden laboratory of Master Scientist Eliot Leithgow.

CHAPTER VIII

White's Brain—Yellow's Head

TO Friday it was a bad mistake to reveal the location of the laboratory to Dr. Ku Sui. From him above all men had that location up to now been kept. Just a few days before, Hawk Carse had risked his life to preserve the secret. And yet now, deliberately, he was showing it to the Eurasian!

Nervously, Friday watched him, and he saw that his eyes were alive with interest as they scanned the visi-screen. It was too much for the Negro.

"Captain Carse," he whispered, coming close to the adventurer, "look, suh—he's seein' it all! Shouldn't I blindfold him?"

Carse shook his head, but turned to Dr. Ku, where he sat bound in the chair, scrutinizing the visi-screen.

"Yes, Doctor," he said, "there it is—what you have searched for so long—the refuge and the laboratory of Eliot Leithgow."

"There, Captain?" murmured the Eurasian. "I see nothing!"

And true, the visi-screen showed nothing but a hill, a lake, a swamp, and the distant, surrounding jungle.

That spot on Satellite III had been most carefully chosen by the Master Scientist and Carse as best suiting their needs. It lay at least a thousand miles—a thousand miles of ugly, primeval jungle—from the nearest unfriendly iruan ranch, and was diametrically opposite Port o' Porno. Thus it allowed Leithgow and Carse to come and go with but faint chance of being observed, and the steady watch kept through the laboratory's telescopic instruments lessened even that. And even if their movements to and from the laboratory had been observed, a spy could have discovered little, so ingeniously was the camouflage contrived to use to best advantage the natural features of the landscape.

At this spot on Satellite III there was a small lake, long rather than wide. At its shallow end, the lake lost itself in marshy, thick-grown swamps; at its deep end it washed against the slopes of a low, rounded hill. Topping the hill was a rude ranch-house, which to the casual eye would appear the unimportant habitation of some poor jungle-squatter, with beds of various vegetables and fruits growing around it, and guarded against the jungle's animals by what looked like a makeshift fence. The ground inside the fence had been cleared save for a few thick, dead stumps of ori trees, gnarled and weather-beaten, which made the whole outlay look crude and desolate.

So desolate, so poor, so humble, as not to deserve a second glance from the lowest of scavenger or pirate ships. So misleading!

CARSE had brought the invisible asteroid to a halt perhaps a half mile above the hill. The minutes were slipping by, bringing the two-hour deadline ever closer, but he did not skimp his customary caution on approaching the laboratory. From the control room, he swept the electelscope over the surrounding terrain, and soon sighted the band of isuanacs Eliot Leithgow had mentioned.

Through the 'scope's magnifying mirrors they seemed but yards away, though they were wandering knee-deep in the marshes at the far end of the lake. All their repulsive details stood out clearly.

More beasts than men, were such isuanacs (pronounced ee-swan-acs), so called from the drug that had betrayed them step by step to a pit in which there was no intelligence, no light, no hope—nothing but their mind-shattering craving. In many and unpredictable ways did the drug ravish their bodies. They were outcasts from the port of outcasts, driven out of Porno into the wilderness, where they tracked out their miry ways searching ever for the isuan weed until some animal ended their enslavement, or the drug itself finally killed them in convulsions. They were the legion of the damned.

This band of half a dozen was typical, grubbing through the slime of the swamp, snarling at each other, now and again fighting over a leaf, then squatting down in the mud where they were, to chew on it, their torture of mind and body momentarily forgotten. Rags, mud-caked and foul, partly covered their emaciated bodies; their hair was matted, their eyes blood-shot....

Carse noted their position and looked up at Friday.

"Get the Master Scientist for me, please," he requested. The radio connection took only seconds; and then he said into the microphone:

"Eliot? We're directly above you, as you probably have seen. All well?"

"Yes, Carse. The laboratory's in readiness. But those isuanacs—they're still outside."

"I've seen them, and I'm going to drive them away. Then I'll be down to you. Have the upper entrance ready."

THE Hawk turned back to the controls. Taking the space-stick out of neutral, he moved it very slightly down and to one side. Ban and Friday, not understanding his intention, watched the visi-screen.

The whole mass of rock that was the asteroid changed position at a gentle speed. The band of isuanacs came nearer and nearer, and then were to the right. Completely oblivious of the great bulk hovering above them, they continued their grubbing through the swamp; and then the asteroid was over the jungle beyond them, and lowering its craggy under-side.

The under-side brushed the crown of the jungle. The trees beat, crackled and broke, as if swept by a vicious but silent hurricane. Only a moment of contact; but in that moment a square mile of interwoven trees and vines was swept low—and to the isuanacs the effect, as was intended, was terrifying.

They stared at the phenomenon. There had been no sound, no whip of wind, nothing—yet all those trees had bent and crashed splintering to the ground. Their slavering lips open, the isuan weed forgotten, they stared; and then howling and shrieking they broke and went splashing off panic-stricken through the marsh.

In five minutes the band had disappeared into the jungle in the opposite direction and the district was cleared; and by that time Hawk

Carse was again in his space-suit, out of the control room and busy at the mechanism of one of the great ship-sized port-locks in the dome, having left behind him both Ban and Friday to guard Dr. Ku.

He mastered the controls of the port-lock quickly, and swung inner and outer doors open. He glided through, and then, a giant, clumsy figure, poised far out in the air, a soft breeze washing his face as he gazed down at the hill five miles below, judging his descent. As he did not use the infra-red instrument hanging from his neck, the asteroid might not have been there at all.

A moment or so later, after a straight, swift drop, Carse landed on the hill, close to a particular, gnarled oxi-tree stump. The nearby ranch-house looked deserted, the whole place seemed desolate. The Hawk waddled over to the stump, pressed a crooked little twig sticking out from it, and a section of the seeming-bark slid down, revealing the hollow, metal-sided interior of a cleverly camouflaged shaft.

There were rungs inside, but Carse could not use them. He squeezed himself in, closed the entrance panel, and, carefully manipulating his gravity controls, floated down. A descent of twenty-five feet, and he was on the floor of a short, level corridor with gray walls and ceiling.

Carse clumped along to the door at the other end of the corridor, opened it, and stepped into the hidden underground laboratory of Master Scientist Eliot Leithgow, which, with its storerooms, living quarters and space-ship hangar, had been built into the hollowed-out hill.

"WELCOME back, Carse!"

"Hello, Eliot," the Hawk nodded, rapidly divesting himself of the suit but retaining his infra-red device. "You've lost no time, I see."

The elderly scientist, his frail form clad in a buff-colored smock, turned and surveyed the laboratory. In the center of the square room five improvised operating tables were drawn up, each one flooded individually with light from focused flood-tubes above in the white ceiling. Flanking them were tables for instruments and sterilizers, and, more prominent, two small sleek cylindrical drums, from one of which sprouted a tube ending in a breathing-cone.

"The best I could do on such short notice," Leithgow commented.

"Where are your assistants?"

"At work on the V-27. All I had on hand is in those cylinders."

"Much?"

"Enough for twelve hours for one man, but the process of its manufacture is accelerating; fortunately I had plenty of ingredients. Of course I've divined your intention, Carse. Ku Sui to perform the operations under the V-27. And it's possible, possible! It's stupendous—and possible!"

"Yes," said the Hawk, "but more later. I'm going up now to get Dr. Ku. I'll use the air-car. It's ready?"

"Yes," Leithgow answered. "But, Carse—one question I must ask—"

The Hawk, already halfway to the door in the opposite wall of the laboratory, paused and looked back inquiringly.

"What bodies are to be used?"

"The only ones available, Eliot," the adventurer replied, "since Ku Sui, in his attempt to destroy the brains, left us only two hours—now one hour—to complete the first steps of the transfer. They'll be those four white assistants of his—those men, you remember, whose intellects he's dehumanized—"

"Yes, yes?" Leithgow pressed him eagerly. "And the fifth?"

"A robot coolie."

"Good God!"

"I know, Eliot! It won't be pleasant for one of those brains to find itself in a yellow body. But it's that or nothing."

The scientist nodded slowly, his first expression of shock leaving his old face to sadness. "But a coolie. A coolie...."

"Come, Eliot, we need speed! Speed! We've but an hour, remember, to complete the first steps! I'll have Ku Sui and the five men down immediately."

The Hawk opened the door and strode down the long corridor beyond. His footsteps were swiftly gone; and then the sound of another door opening and closing. In the laboratory there was a murmur from the old man.

"A coolie! A scientist's brain in that ugly yellow head! When consciousness returns, what a cruel shock!"

CHAPTER IX

Four Bodies

HAWK CARSE had gone into Leithgow's ship hangar.

It was a vast place, occupying most of the hollowed-out space of the hill. Seventy feet high and more than two hundred feet long, it was, and, like the rest of the rooms, metal-walled and sound-proofed Eliot Leithgow's own personal space-ship, the *Sandra*, rested there on its mooring cradle, and by its side was the laboratory's air-car, an identical shape in miniature, designed for atmospheric transit.

The adventurer, a silent, swift figure, went straight to the air-car and climbed into its control seat. He tested the controls, found them responsive, then pressed a button set apart from the others; and the huge port-lock door set in the farther wall of the hangar slid smoothly open, revealing a metal chamber similar to that of the ship port-lock on Ku Sui's asteroid. But whereas the chamber of the asteroid's port-lock was for vacuum-atmosphere, this was for water-atmosphere.

The clamps of the mooring cradle were released, and the air-car moved gently into the lock chamber. The door swung shut behind. On the pressing of another button there sounded a gurgling and splashing of water, and quickly the chamber was filled. The air-car was now a submarine. All these operations were effected by radio control from within it.

When the water filled the inside of the chamber, the second door opened automatically, and the car started forward through a long steel-lined, water-filled tube. It continued on even keel until Carse, watching through the bow window, saw a red light flash in the ceiling of the tube; and then he tilted the car and rose.

A second later, the shiny, water-dripping shape of the car broke through the surface of the lake that edged on the hill, and forsook the water for the air.

To an outside observer, the appearance of the air-car and its subsequent movements would have been incomprehensible. There lay the hill, desolate, barren, apparently lifeless; and there, washing against its slopes, the lake; nothing more. Then suddenly a curve of gleaming steel thrust up through the muddy water, rose swiftly almost straight into the cloudless blue of the sky, and as suddenly disappeared, and remained gone from sight, as if the ether had opened and swallowed it.

USING his infra-red device, Carse brought the car in neatly through the ship-size port-lock of the dome, and sped it across to

the central building, to land lightly beside one of the wings. Debarking, he ran down the wing's passage and in a few seconds was back in the asteroid's control room.

Friday was sitting in a chair close by the bound Eurasian; Ban Wilson, more restless, was pacing up and down. The Hawk nodded in response to their looks of welcome and issued curt orders.

"All ready, Ban, the air-car's just outside; go over and get those four men and the coolie and put them in it. Have your raygun ready, but don't use it if humanly possible. We're going down to the laboratory. I want speed. Please hurry."

"Right, Carse!"

"Friday," the Hawk continued, "help me untie Dr. Ku."

They stooped to the chair and the impassive, silken figure sitting in it, and in a moment the bonds were ripped off, all save those on the wrists. Stretching himself, the Eurasian asked:

"You are taking the brains down now, Captain Carse?"

"No—just you, your assistants and that one coolie, this trip. Master Leithgow and I wish to have a talk with you."

"I am always agreeable, my friend."

"Yes," said the Hawk, "you'll be surprisingly agreeable. And truthful and helpful, too. Now—outside, please, and do not attempt to delay me in any way. I am in a great hurry, and consequently will not be patient at any tricks." He turned to the Negro. "Friday, I'm leaving you here on guard. Stay alert, gun handy, and keep in radio contact. I'll be back soon."

"Yes, suh!"

WALKING behind his captive, the Hawk left, passing down the wing to the air-car outside. There, Ban Wilson was waiting with the four white assistants of Dr. Ku and the one robot-coolie, all unarmed, stolid, emotionless. Carse placed them all in the rear seats of the car's compartment, Ban facing them with drawn raygun. Then with a hum from its generators the car raised, wheeled, slid forward, until through the large port-lock, and swooped down to the lake.

Dr. Ku Sui watched everything with an interest he did not attempt to disguise. There was being revealed to him the secret entrance to Eliot Leithgow's laboratory, and long had he sought for that laboratory, long pondered on its probable location. No doubt, at various times, passing over, he had seen the barren hill and its flanking lake, but had never given them a second glance. Yet here, right in the lake, was the doorway to Leithgow's refuge!

The air-car lowered like a humming bird to the lake's surface, paused and dipped under. The light left the sealed ports and entrance hatchway, and the water pressed around, dark and muddy. Down the car sunk, apparently without direction, its course very slow, until ahead, out of the blackness, a spot of red winked.

At once the air-car made towards it and slid into the tube leading through the hill. Quickly it was in the chamber of the lock, the outer door closed automatically behind, the water was drained out, and then the inner door opened and the car, dripping, emerged into the brilliantly-lit hangar and went to rest in its mooring cradle beside Leithgow's space-ship.

A minute later its passengers were in the laboratory of the Master Scientist.

DR. KU SUI took in the arrangements made in the laboratory with a swift glance, and then his eyes went to a door that

opened in the opposite wall and to the slight, smock-garbed figure that came through it. He smiled

"Ah, Master Leithgow! A return visit, you see. At Captain Carse's invitation. It is very interesting to me, this home of yours, so cleverly concealed!"

Leithgow vouchsafed his arch-enemy no more than a look, but turned to the Hawk.

"You are ready, Carse?"

"Some preliminaries first, Eliot. These men, the four whites and the yellow, must be put in some place of safety. You can take care of them, Ban. One of the storerooms; lock them in. You remember your way? Then, better take off your suit."

Ban nodded, and led the five robot-humans out. Leithgow, Hawk Carse and Ku Sui were left alone in the laboratory, and for a minute there was silence.

How much had passed between these three! How many plots, and counter-plots: how much blood: how many lives affected! The feud of Hawk Carse and Dr. Ku Sui—and Eliot Leithgow, who was the chief cause of it—here again had come to a head. Here again were all the varied forces of brains and guile, science and skill, marshaled in the great, vital game on whose outcome depended the restoration of Eliot Leithgow and the lives of the coordinated brains—and, indeed, though more distantly, the fate of all the tribes of men on all the planets. For if Ku Sui won free he would go on irresistibly, and his goal was the domination of the solar system . . .

Three men, alone in a room—and the course of the creature Man being affected by their every move. Large words: but the histories of the period bear them out. Though doubtless, Ku Sui alone knew how great were the stakes as they stood there in the laboratory.

HAWK CARSE was uneasy. The odds seemed all on his side—yet there was Ku Sui's strange, almost imperceptible smile, his mysterious words up on the asteroid, his smooth, unruffled assurance! What did these things mean? He intended now to find out. He said, tersely:

"Eliot, I have informed Dr. Ku that he is to be the means of the transplantion of the coordinated brains to living human bodies, since he is the only person capable of performing the operations. He does not believe that we can force him to do our will, yet all the same he is taking no chances: he started the death of the brains. We shall have to work very fast—all right. But Dr. Ku has other cards to play against us, and I don't know what they are. You and I must find out now."

"I somehow feel that you mistrust me," interposed the Eurasian with mock sadness. "Ah, if you could only read my mind.... Or can you? Is that what you are coming to?"

The Hawk glanced at Leithgow; and Leithgow nodded, and placed a metal chair close to one of the cylindrical drums—the one fitted with a tube and breathing cone.

"Will you sit there, Dr. Ku?" Carse asked.

The green eyes scanned the drum.

"A gas, Master Leithgow?"

"That is all. Not harmful, not painful."

"I see, I see ..." the Eurasian murmured. And suddenly he smiled at the two men facing him, and said pleasantly to Carse:

"Things repeat! Not long ago I asked you to sit in a chair and submit to a treatment of mine, and you did as I asked. After so gallant a precedent, how could I refuse? All right. Now, Master Leithgow, your gas!"

WITH gentle fingers Eliot Leithgow fitted the cone on the Eurasian's face and fastened it there. The fingers and thumb of one hand he kept on Dr. Ku's pulse; with the other he pulled over slowly a control set in the side of the drum. A ticking and slight hissing became audible, and two indicators on the drum quivered and crept downward.

A minute of this—the ticking and soft hissing, the indicator's slow fall, the silk-clad figure in the chair, watched closely by Carse on one side and Eliot Leithgow on the other—and a change was apparent. A ripple flowed over the Eurasian's silken garments; the body appeared to loosen up, to become free of all muscular and mental tension. The gas hissed on.

"The first step," murmured Leithgow abstractedly, out of his concentration on dials and patient. "The muscles—notice—relaxed. The will—the ego—the nexi of emotions and volitions which oppose external direction—all being worked upon, submerged, neutralised—but not his knowledge, not his skill. No—all that he will retain! You'll notice nothing more until you see his eyes. A few minutes. What says the red hand? Thirteen. At nineteen it should be completed."

Carse watched intently. It was wonderful to know that when the correct amount of this substance, which he knew only as V-27, had been administered, and Ku Sui awoke, there would be no enmity in him, no opposition to their demands, no fencing with wits; that this same Ku Sui, his great mentality unimpaired, would be subservient and entirely dependable.

"Seventeen," murmured the old scientist. "Eighteen . . . now!" With a flick of his fingers he shut off the stream of V-27 and gently unloosened the cone from Dr. Ku's face.

The ascetic features were in repose, the eyelids closed, their long black lashes lying against the delicate saffron of the skin. Dr. Ku Sui seemed resting in dreamless, unclouded sleep. But for only a moment. Soon the eyelids quivered and slowly opened—and a great change was immediately visible in the man's green eyes.

Many observers have recorded that under the veiled, enigmatic eyes of Dr. Ku Sui there lurked a sultry glimmer of fire; or perhaps it was that the observers who met these eyes always imagined the fire, being conscious of the devil and the tiger in the man. But Carse and Leithgow now saw that all that was gone.

No mask lay over the green eyes now, no spark of fire glinted deep in them. They were clear and serene; they hid nothing; almost they were the eyes of a fresh, innocent child. Dr. Ku Sui, he of a hundred schemes, a score of plots, he of the magnificent capacity and untiring brain bearing ever toward his goal of lordship of the solar system—it was as if he had slipped into a magic pool whose waters had washed him clean and given him innocence and eyes of peace....

THE Eurasian breathed deeply, then smiled at the two men standing by him.

"Now," whispered Eliot Leithgow. "Ask him anything. He will answer truthfully."

The Hawk lost no time. He asked:

"Dr. Ku, you will perform the brain transplantations for us?"

"Yes, my friend."

The man's tone was different. Gone was the suaveness, the customary polite mockery; it was frank, open, genuinely pleasant.

"Is it true, Dr. Ku, that your coordinated brains will die, if left in their case?"

"Yes, they will die if left there."

"Within what time, to save them, must the operations to transplant them into human bodies be started?"

"Within twenty-five, perhaps thirty, minutes at the most."

"Can all five brains be given the initial steps for transplantation into the heads of your four white assistants and the coolie prisoner within one hour—the remaining half of the two hours the brains said they would retain the necessary vitality?"

Dr. Ku smiled at him. There was no malice in the thunderbolt that he unleashed then. He simply told what he knew to be the truth.

"By fast work they could be, and so saved, although the subsequent operations will take weeks. But the brains cannot be transplanted into the heads of my four white assistants."

"What?" Both the Hawk and Leithgow cried the word out together. "They cannot?"

DR. KU looked at them as though astonished.

"Why, no, my friends! I wish I were able to, but I cannot perform the operations by myself, unaided. That would be impossible, absurd. . . . You seem startled. Surely you must have known that those assistants would be vital to the work! I have taught them, you see: trained them: they were specialists in brain surgery to begin with, and I do not believe there are any others this side of Mars who could take their place in operations of this type. Without them, I could never transplant the brains."

This, then, had been the trick up his sleeve! This was why, in the control room of the asteroid, he had shown relief when the Hawk told him what bodies were to be used for the transplantation! For he had known that, whatever Eliot Leithgow's method of forcing him to perform the operations might be, and no matter how efficacious, the coordinated brains simply could not be put in the heads of his four assistants—because the assistants were themselves needed for the operations!

"Then—it's hopeless!" said the Master Scientist bitterly. "All this for nothing! You might find other bodies in Port o' Porno, Carse—condemned men, criminals—but Porno's an hour away, two hours' round trip, and in thirty minutes the brains will be too weak to save. . . ."

"I am sorry," Ku Sui continued. "I should have told you before, perhaps. If there were any way out I knew of, I would tell you but there does not seem to be—"

"Yes," broke in Hawk Carse suddenly. His left hand had been pulling at his bangs of flaxen hair; his brain had been working very fast. He added coldly:

"Yes, there is a way."

LEITHGOW and Ku Sui looked at him inquiringly.

"We need four bodies," he went on. "We have one—the coolie: he is not needed to assist in the operations. Four bodies—and here, ready, in twenty-five minutes. Not the bodies of normal men, of those with life ahead of them. No. That would be murder. Four bodies of condemned men—men with no hope left, nothing left to live for. I can get them!"

He brushed aside Ku Sui's and Leithgow's questions. He was all steel now, frigid, intent, hard. "Ban!" he called. "Ban Wilson!"

"Yes, Carse?" Ban had been waiting outside the laboratory.

"Put on your propulsive spacesuit. Hurry. Then here."

"Right!"

Carse ran over to where he had left his suit and rapidly got inside. As he did so, he said:

"Eliot, there's fast work to be done while I'm gone with Ban. You must take your assistants and Dr. Ku up to the asteroid in the air-car and transfer down here all the equipment Dr. Ku says he'll need. Be extremely careful with the case of coordinated brains. If you possibly can, have everything in readiness by the time Ban and I return with the four bodies."

Ban Wilson, in his suit, entered the laboratory. The Hawk gestured him to the door which led to the tree-shaft to the surface.

"But, Carse, what bodies? Where can you get four more living human bodies?" Leithgow cried.

"No time, now, Eliot!" the Hawk rapped out, turning at the door. "Just do as I say—and hurry! I'll get them!"

And he was gone.

CHAPTER X

The Promise Fulfilled

ALTHOUGH puzzled by the Hawk's promise, Leithgow could only put his trust in it and go ahead with the preparations as he had been directed. He took two of his three laboratory assistants off their hurried manufacture of quantities of the V-27, and with Ku Sui went out into the air-car. Passing by way of tube and lake and air, they were quickly inside the dome on the asteroid, and then into Ku Sui's laboratory, where Friday waited on guard.

Completely docile and friendly, the Eurasian indicated the various instruments and devices he would need for the operations, and these were transported quickly. Then came the case of coordinated brains. Dr. Ku detached its connections with expert fingers, and all but Leithgow took a corner and carried it with infinite care to the air-car outside.

"Do I stay here, suh?" Friday asked the Master Scientist in a whisper. Though informed of the change in Dr. Ku effected by the V-27, he was still very suspicious of him. "Seems to me he's a bit too meek and mild, suh. I think I ought to go down and watch him."

Eliot Leithgow did not quite know what answer to give. The Eurasian forced the decision.

"I will need," he observed, in his new, frank voice, "all the assistance you can possibly give me. I am faced by a tremendous task, and the use of every man will be necessary. I would suggest, Master Leithgow, that the Negro be brought down."

And so Friday came, and the asteroid was left unguarded. A mistake, this turned out to be, but under the circumstances Eliot Leithgow could hardly be blamed for it. There was so much on their minds, so much work of vital importance, so desperate a need for speed, that quite naturally other considerations were subordinated. The asteroid, to the naked eye, was invisible; it could attract no attention; its occupants had all been disposed of. Certainly it seemed safe enough to leave it unguarded for a while.

However, Eliot Leithgow took one precaution. Down in his own laboratory again, in the midst of the work of transferring Dr. Ku's operating equipment from the air-car, he called aside one of his assistants and instructed him to go and survey the asteroid through the infra-red device every ten minutes: and with this order the old scientist dismissed the matter from his mind, and turned all his energies to preparing the laboratory for the operations.

UNDER KU SUI'S directions his cases of equipment were brought in and arrayed, and the various drills and delicate saws, and

such other instruments as worked by electricity, were connected. Everything was sterilized. Rapidly the plain, square room assumed the appearance of an operating arena, the five tables in the center, spotlessly white and clean under the direct beams of the tubes hanging from the ceiling, at the head of every table a stand on which were containers of antiseptics, bottles of etheloid, a breathing cone, rolls of gauze and other materials, and along the edge of the stand identical, complete sets of fine instruments.

The case of coordinated brains was brought into the laboratory last. The inner liquid was now dark and apparently lifeless; to the casual eye, it would not have seemed possible that the five grayish mounds immersed in the liquid held life. And, indeed, Leithgow looked at them doubtfully.

"Are you sure they're still alive? Do you think there's still time?" he asked Dr. Ku.

The Eurasian picked up a long, slender, tubelike instrument with a dial topping it. Then, going to the brain-case, he touched a cleverly concealed catch and a square pane set in the top of the case swung back. He dipped the instrument he held into the liquid, and for a moment stood silent, watching the dial. Then he took it out, reclosed the pane and turned to Leithgow.

"A test," he explained. "The indicator, interpreted means we have about forty-eight minutes in which to complete the first phase of the transplantation of the brains into human heads. It might be done if we start in eight minutes. But the human heads—?" He paused.

"Eight minutes!" said Leithgow worriedly. "Eight minutes for Carse to come! He promised the bodies, but . . . well, we can only go ahead with the preparations and trust to him. Is everything ready?"

"All but my assistants. I had better see them now."

THE Master Scientist issued an order to one of his men, and presently the four white assistants of Dr. Ku were led into the laboratory. For these men, no V-27 was needed; their brains were utterly subservient to Dr. Ku Sui, and his orders they would obey unquestioningly, no matter what the work. There was no danger from them.

They stood motionless, their eyes fastened on their master, as he spoke to them.

"Brain operations," he said. "These"—he indicated the case—"are to be transplanted again into human heads. You have done work similar to it before; you know the routine. But now it must be quick. Synchronize your speed with mine; I will be working very rapidly, and it is vital that you be in harmony with me every instant. When the bodies come, you will prepare the heads; and then you will attend me through every step. You understand." He turned to the old scientist. "Operating gowns, gloves, masks, Master Leithgow?"

"I have your own. Over there. Your black costume is among them."

But Leithgow's answer was abstracted. Four minutes for Carse to come! Or else, everything lost! He busied himself helping the four surgeons and two of his own assistants into the white, sterilized gowns, and the masks that left only the eyes free and the skin-tight rubber gloves, but his mind was not with his actions. The old man looked very frail now; his age showed in the deep lines now eminent on his face. Three minutes—swiftly two....

"At least," observed Ku Sui, "we have one body, the coolie. I had better start immediately on him."

"Bring him out," Leithgow instructed one of his men. "One brain will be saved. But—*there!* Thank God! Hear that? Coming down the passage? It's Carse, returning!"

IT was Carse. He and Ben Wilson, coming down the passage from the top of the tree-shaft. Everyone in the laboratory could hear plainly the heavy, sliding tread of the great space-boots. Eliot Leithgow was first to the door. He opened it, peered through eagerly and called:

"Carse? You've got them?"

"Yes, Eliot. Here—we need help."

The Hawk's voice sounded weary. Friday and the scientist ran down the passageway until they reached the adventurer. In the faint light, they saw he was carrying a limp body. He laid it carefully down on the floor.

"Ben's coming down with another," he said, "and there are two more above. Go up and get them, Friday."

The Negro started to obey. But Eliot Leithgow did not move, did not utter a sound. He stood staring at the body Carse had laid down. The parchmentlike skin of his face seemed to whiten; that was all; but he winced and slowly brushed his eyes with his hands when, in a moment, Ben Wilson floated down the shaft and approached with a second unconscious body.

At last Leithgow whispered:

"They're all—like that, Carse?"

"Yes," answered the emotionless voice. "There were two others, but we let them go. They were worse." The gray eyes looked steadily at Eliot Leithgow. "I know," the Hawk said. "It's horrible—but it can't be helped. It was these or nothing. There was no choice."

Hawk Carse had fulfilled his promise. He had brought back four humans.

CHAPTER XI

Ordeal

FIVE bodies lay on the operating tables in Eliot Leithgow's laboratory. The air, hushed and heavy, was pervaded by the various odors of antiseptics and etheloid. The breathing cones had been applied to each of the bodies, and they were now locked fast in controlled unconsciousness.

On the first table lay the body of the robot-coolie, a man of medium size, sturdy, well-muscled, with the smooth round yellow face and stub nose of his kind. His short-cropped, bristly black hair had been shaved off; the head was now bald. That head was destined to hold the mighty brain of Master Scientist Raymond Cram.

On the second table lay a twisted, distorted thing, an apelike body with which fate had played grotesque pranks. It was hairy, of middle height, and its dark skin all over was wizened and coarse, almost like the bark of a tree. The legs were short and bowed, the hands stubby claws; the face, puckered even in unconsciousness, was that of a gargoyle in pain. The long matted hair had been shaved away; the large pate washed with antiseptics. Soon, were the operation successful, that head would hold the brain of Professor Edgar Estapp, world-famous chemist and bio-chemist.

On the third table lay a shape skeletonlike in appearance, so emaciated was it, so closely did the bones press into the dry, fever-yellowed skin. Of one leg, only the stump was left; this creature had been forced to hop or crawl his way through the isuan swamps. The head, too, was no more than a skull, with great sunken dark-rimmed eyes, discolored fangs and loose, leathery lips. There had been no hair on this death's-head; it had

long been bald, and now, washed, clean for the first time in months or even years, it was to hold the brain of Dr. Ralph Swanson, Earth's one-time leader in the science of psychology.

On the fourth table lay a giant's body—but a hollow giant, a giant made thin and pitiful by the ravages of his destroyer, isuan. A roistering, free-booting space-ship sailor, this man may once have been, but, from the drug, the mighty arms had been twisted and shrivelled, the strong legs wasted away. One ear had been torn from the skull in an old brawl, and what was left was naked and ugly to the eye. Behind that bitter, drug-coarsened face would be the new home of the brain of Sir Charles Esme Norman, wizard of mathematics and once a polished, charming Englishman.

On the fifth table lay a dwarf. Its ridiculous body was not over four and a half feet long, though the head was larger than that of a normal man. In the old dark ages on Earth this body would have served for the jester of a lord, the comic butt of a king; in more recent times as the prize of a circus side-show. The huge, weighty head with its ugly brooding mask of a face, the child's body below—this was for the brain of Professor Erich Geinst, the solitary German who had stood preeminent on Earth in astronomy.

THESE creatures were the result of Hawk Carse's desperate search. They had composed, with one other, the band of isuanacs that had been rooting in the swamp at the end of the lake when the asteroid had first arrived. The Hawk had remembered them, and had quickly seen that they were the only answer to the problem. And so, with Ban Wilson, he had gone out for them, his mind steeled to the ghastly thought of the great scientists' brains in such bodies. In space-suits they had swept down on them. There had been no time for considerate measures; the four isuanacs had been abruptly knocked out by the impact of the great suits swooping against them, and carried back to the laboratory.

Eliot Leithgow had been shocked at the idea of a scientist's brain in the head of the robot-coolie; how much greater, then, was his horror when confronted by the need of using these appalling remnants of men! But he could not protest. What else was there? Ku Sui, under the V-27, had spoken the truth—the operations would be impossible without the aid of his four assistants. The brains even now were dying. The choice was: bodies of isuanacs or death for the brains. The scientist and the adventurer had chosen.

Circumstances had required their use. Ku Sui's attempt to kill the brains, thus inflicting a time limit; the presence of the band of isuanacs near the laboratory; each circumstance with a long train of other, minor ones behind it. Chance or Fate—whatever it is—whether predetermined or accidental—men must wonder at its working, and know awe from its patterns and results. Seldom, certainly, was there a pattern more strange than this now being worked out in the laboratory of Master Scientist Eliot Leithgow.

The bodies lay there, washed, shaved and swathed in customary loose operating garments; globules of etheloid dropped steadily down into the breathing cones, of hunchback, living skeleton, twisted giant, dwarf and robot-coolie. One by one the isuanacs dropped with the falling of the etheloid into unconsciousness—and that was their farewell to the brains, each one debauched either by isuan-drug or

skill of genius that they had known.

And movement began in the laboratory. White-clothed figures, masked and capped, used gleaming instruments in their gloved hands: and all the figures were mute—mute from their great concentration on the delicate work in progress—or mute from horror that would not die....

SO began the ordeal.

Of its details, Hawk Carse knew little. They were not of his world. Only for the first half-hour could he follow intelligently what was being done. He too had put on a white robe, as had Ban Wilson and Friday; and he stood at one side of the room, a silent, intently watching figure, with the two other men of action, Ban and the Negro, while the rest moved in a kind of rhythm. The center-piece was the black-garbed Ku Sui, moving from this table to that, slim gloved hands flying, pausing, flying again, steadily, concentrating on a detail, once more sweeping forward. No more than single words came from him; he and his assistants worked almost as a whole, in perfect sympathy and coordination, and a constant stream of instruments flowed to him and then away, their task done.

The first table, and then to the second, with one white figure staying behind at the first, finishing off details of the work left by the master. The third table; the fourth; the fifth; and then back to the first, while two white figures detached themselves from the main group and went to the nearby case of co-ordinated brains. An object held in a specially formed type of pan was lifted out and carried to the first table; and Carse sensed a crisis in the attitudes of the working men. This, he knew, was the first great step. A brain was being re-born. The fingers of men, and one man in particular, were fashioning a miracle.

How could he hope to understand? He could only hang on the movements of that group of figures, and feel relief as he saw them settle into smoothness again. Evidently the first crisis was past. A few minutes more were spent at the first table; then once more Dr. Ku Sui went to the second, and another object was carried from the coldly gleaming case.

And in a long, deep pan standing on short legs beside the case, something gray and shapeless and warm was placed.

The first phase came to an end when there were five similar things in the open pan, and nothing, except the liquid and a multitude of spidery, disconnected wires, in the case that but shortly before had harbored the brains of five scientists....

A PAUSE. Relaxation. Tests. The black-clad figure spoke to one in yellow in a tone of pleased relief.

"Successful so far, Master Leithgow! We may congratulate ourselves on the consummation of the first step. It has been done, I believe, well within the time limit."

"Yes, Dr. Ku; yes. And now—how long will be needed to finish?"

"That is up to you. Normally, I would require a month. In that time all could be done safely, with small chance—"

"Too long!" said Leithgow.

Carse intervened:

"Why too long, Eliot?"

The old scientist went over close to him, and, in a lowered voice, explained:

"Ku Sui would develop immunity to the V-27 in a month. Two weeks of it would give him part immunity. Even ten days might. He has to be re-gassed four times a day."

"But, letting him come out of it every night and resting normally?" the Hawk objected.

"I have allowed for that. The gas would still be in his system. No—nine or ten days is the limit." He raised his voice again to reach the Eurasian. "Can you complete the work within nine days, Dr. Ku?"

Ku Sui considered it. At last he said:

"That is a lot to ask, Master Leithgow. But—it might be possible. However, it would mean prodigies of sustained, concentrated labor; work and skill never-ceasing. We'll have to work in shifts, naturally."

So it was arranged. All the assistants, both Ku Sui's and Leithgow's, were portioned off into shifts of four hours' sleep and eight hours' work; Carse, Ban Wilson and Friday, too, for now every one of them was needed.

Nine days for the work of a month—and work as delicate and vital as could possibly be! Small wonder that in the minds of all of them, the Hawk and the old scientist, and Ban and the Negro, that period, when remembered later, seemed no more than a confused, unreal, hazy dream; rather, a nightmare connected imperishably with the odors of an operating room, antiseptics, etheloid, and the glint of small, sharp instruments.

It was a titanic task, an ordeal that stretched to the limit the powers of the men working in that confined space. Normal life for them ceased; the operating room became a new universe. Swiftly they lost consciousness of time, even with the routine of the changing shifts and the food which was brought in at regular hours. Antiseptics, etheloid, the never-ceasing flow of the instruments, the five bodies lying still and deathlike on the tables, the hard white glare of the light beating down on them—all this and nothing more—all sealed away underground from the life of the forgotten world above. On and on and on....

IT is impossible even to conjecture how the mind of Ku Sui saw the colossal work that he was doing to aid his most bitter enemies. Even when he was normal there are only moments when, through some recorded speech or action of his, we can peer past the man's personality into his brain; how great a sealed mystery must his thoughts remain to us when held in that abnormal state by Eliot Leithgow's V-27! Envision it: this arch-foe of Hawk Carse and Leithgow helping their designs, lending all his intellect, his great skill, to their purposes, aiding them in everything! Certainly, afterwards, the memory of what he had been forced to do must have occasioned Dr. Ku many bitter moments. Regularly, every four waking hours, he was led to the metal chair and gassed afresh with the V-27, and his expression remained pleasant; his eyes were always friendly. But the artificial state in which he was kept showed soon on his face. It lost its clearness and became a jaundiced yellow in color; and also it grew peaked and drawn.

But the other faces around him were peaked and drawn, too. The terrific strain told in definite terms on all, no matter what stimulants they took to keep going. Many a man would have been driven to insanity by their sustained, terrible concentration, and the knowledge that five lives hung on every action, however minute....

On and on and on, science made into a marathon. Four hours of exhausted, deathlike sleep; eight hours more of the smells, and the glaring light, and the moving instruments. Days of this, sealing the

brains permanently into their new homes, into their hideous new bodies. . . .

But finally came the climax, and the last exhausted spurt of work. For the concluding twelve hours there was no sleep or rest for anyone; and at the end a breathless, haggard tension held them as Dr. Ku Sui, a shell of his former self, reviewed the results of the nine days' ordeal. His verdict was:

"Four have come through. I think, safe. The fifth—I do not know. His body was near death when he was brought here. He may live or die; it is impossible to tell now. But it is finished."

Then the men slept. Some slipped to the floor and slept where they were. In nine days, the work of a month had been done, and a miracle wrought. The brains had been born again.

CHAPTER XII

Flight

IT was to Hawk Carse that the news of imminent danger came first.

He had staggered from the laboratory into a sleeping room and, clad as he was, fallen over into a berth. He would have wakened in a few hours, such was his custom of years to four-hour watches on ships, but he was permitted less than an hour of sleep. A hand pulled at him; a voice kept calling his name. Awareness returned to him slowly as his brain roused from the coma of sleep.

"Captain Carse! Captain Carse! Wake up, sir!"

It was one of Leithgow's assistants, a man named Thorpe. His tone was excited and his manner distraught.

"Yes?" the Hawk muttered thickly. "What is it?"

"It's the asteroid, sir! I was instructed to watch it at intervals, but I—I guess I fell asleep, and just now—"

Carse sat up. "Yes? What?"

"—when I looked through the glasses—it was gone!"

"Gone? You're sure? Let me see."

Swiftly, Thorpe at his heels, Carse strode out from the room to a cubby just off the laboratory, the watch-post, where observational electelescopes and visi-screens provided a panorama of the surrounding territory.

He gazed through the electelscope, which had been equipped with an infra-red device and trained on the asteroid, and saw that now, where the massive body of rock had been poised, there was nothing. Only the brilliant light of mid-afternoon, the cloudless sky. Carse swept the glass around. The search was fruitless. The heavens were bare. The asteroid had gone.

In half a minute Carse had reasoned out the disappearance, saw the consequences and made the inevitable decision. Gone was the torpor of sleep, the weariness of the laboratory; this was a crisis, and this was his work. During the operations, he had been able merely to obey orders and do manual work. Now he assumed command.

"Your lapse has imperilled us all," he said curtly to Thorpe. "From now on we're in great danger. Stay here and keep on watch, and sound the alarm immediately if the asteroid reappears."

"Yes, sir. I—I'm sorry—"

The adventurer cut him off with a frigid nod and ran on silent, rapid feet to the laboratory, where both Ban Wilson and Friday lay fast asleep. Roughly Carse shook them into consciousness. Trained to shipboard routine and the sudden emergencies of space, they needed but little time to return to full wakefulness. In staccato sentences the new situation was outlined to them.

"The asteroid's gone. That means danger to everything here. We will have to evacuate. Ban, wake all the men, including Ku Sui and his assistants, then come to me for further orders. Friday, see that Leithgow's ship is ready for instant departure. Quick!"

Alarmed, but without questions, the two parted on their separate errands. Carse went to the room where Eliot Leithgow lay asleep.

THE pallor and weariness of the old scientist's face were emphasized by the alarming news his friend brought him, but he took it with spirit, and his voice was level and controlled as he asked:

"What does it mean, Carse? What must we do?"

"Leave, Eliot, and at once. We have no choice. Our danger while here is immense. The asteroid, in the hands of enemies, could crush us like a fly, simply by coming down on the top of the hill."

"But who could have taken it? There was no one on it, was there?"

The Hawk said wryly: "I thought not, but—well, you remember the secret panel in Dr. Ku's laboratory?"

"Through which he escaped before? Yes."

"I suspected that he might have someone hidden behind it, and I intended to question him when he was under the V-27, but in the terrific rush of things it slipped my mind. Sheer carelessness, Eliot; I'm very sorry. I should have known, for when we captured Ku Sui he spoke some words in Chinese through his helmet-radio. Now I can see that they must have gone to some man of his hidden there; and that man, obeying instructions, simply lay low, heard all that passed in Dr. Ku's laboratory, and then, at a suitable opportunity, took the asteroid away in search of allies. He knows his master is a prisoner here and unquestionably he will be back to release him. We must be out of here and far away by the time he arrives."

"Yes," Leithgow nodded slowly. "As you say, there is no choice."

"But your work here is finished, Eliot," Carse went on. "If only we can get to Earth safely, with Ku Sui and the brains in their new bodies, we will have achieved everything we wanted to achieve. We have proof of the crime done you, and we have Ku Sui, too. Your position will be restored and the blame put where it belongs. But we must leave for Earth at once! God knows how near the asteroid is, or who's on it."

"All right, Carse." The scientist got up. "What are your instructions?"

Ban Wilson appeared in the door, reporting that all the men had been accounted for and awakened. Carse started the wheels moving.

"Everything of value here must be transported aboard the ship. Eliot, you know better than I what to take, so you'll assume charge of the loading. Ban, you and all the men save two of Eliot's assistants will help. I'll need them to move the bodies. Send them to me in the laboratory. But first, be sure Ku Sui and his four men are safely confined. All right; let's go."

Within half an hour the general evacuation was finished and the ship loaded.

THE *Sandra*, Leithgow's ship, bearing his daughter's name, was a sturdy vessel designed more for comfort and utility than speed, and so her appointments, including offensive and defensive weapons, though modern were limited. Her commodious cargo-holds were easily capable of accommodating all of the Master Scientist's laboratory instruments and devices,

the volumes of his extensive library, his great mass of personal papers and more intimate effects; all the more important stores of the place, too, and its furnishings. The laboratory and its surrounding rooms were pretty well stripped.

The largest of the *Sandra's* cabins was transformed under the direction of Leithgow into a hospital bay, and the five cots bearing the prostrate, unconscious bodies of the patients put there. Though hastily improvised, this hospital was complete, as fully equipped and nearly as efficient as if it were on Earth and not in the belly of a space-ship. The chances of the patients for complete recovery were not diminished in any way by the sudden necessity for flight.

In a second, much smaller cabin, Dr. Ku Sui was confined by himself. Its walls, of course, were of metal, and there was no possible means of exit from it save by the door, which bore double locks. The Eurasian, silent and drugged and stupid, immediately stretched his tall form out on the single berth and in seconds was again sound asleep. A third cabin was made over to his four assistants.

With everything completed, the underground refuge bare of articles of value and the *Sandra* stored and made ready for the long trip, the inner door of the exit tube swung open, and the ship slid slowly out of her cradle and into the water chamber for the last time. Her flight to Earth had begun.

Eliot Leithgow stood near the Hawk in the control cabin, and his old face was made sad by many memories. For years, this place that he was now leaving had been his only home, his one sure haven. How carefully, long ago, had he and Carse planned it and built it! How many times had they met there, often when danger was close and enemies near, and cemented still more firmly the bonds between them! To Leithgow, the hill symbolized safety and friendship and his beloved work. Dangerous, weary years, those he had spent in the hill, but priceless nevertheless, warmed as they were by his achievements and the friendship of Hawk Carse.

Now he was leaving it and going back to Earth. The outlaw years, it seemed, were ended: Ku Sui was a prisoner, and the proof of his great crime, which had been laid to Leithgow, was aboard. Earth—green Earth! Separate, distinct, peerless in the universe; home of men of his kind! He had loved and worked and known honor and respect on Earth; it held the grave of his wife, and the fresh, warm young love of his wife reincarnate, his daughter Sandra. He was at last going home to Earth from his exile on this desolate, raw frontier post.

There was a choking in Eliot Leithgow's throat at leaving the hill, and he turned away, afraid at that moment of being observed by the steel-gray eyes of his friend, Hawk Carse. . . .

THE *Sandra* swam up through the lake's muddy tide and launched herself, dripping, into the warm air of afternoon. Her generators hummed with life given them by the firm hand at the controls, and swiftly she arrowed forth into the blue. With a few words as to the visual course, Carse handed the space-stick over to Friday, and devoted himself to the matter of the watches.

Satellite III dropped swiftly to concavity then, as the *Sandra* was expertly jockeyed through the rare outer layer of the stratosphere, became a true globe again. The Negro reported:

"Through the atmosphere, sub. Orders?"

"Full acceleration. Continue vis-

ually for the present. I'll work out the true course in a few minutes."

"Yes, sub!"

The hum of the generators deepened. In a matter of ten minutes, shipboard routine was arranged, Carse, Friday and Ban splitting the watches. The Hawk, as was his custom, took the first. Friday was relieved of the space-stick and immediately went back for sleep, as did Wilson Eliot Leithgow did not retire right away, however.

He watched Carse snap on the automatic control and go to an electelscope which had been equipped with an infra-red device. He directed it rearward on Satellite III, back along the course the *Sandra* had described, and peered through its eyepiece for several minutes. Then he turned to the old scientist.

"Nothing," he said. "No sign of the asteroid as yet. We'll have to keep careful watch. The visi-screen's useless against the invisibility of the asteroid; and the high magnification of this 'scope, with its resulting small field of view, will require us continually and methodically to search through a wide circle behind, in the attempt to pick up the asteroid, should it appear. A tedious job, with chances of sighting it about even. . . . At any rate, we'll have some sort of a head-start," he finished.

THIS was the opportunity Leithgow had waited for; he wanted a few frank words with his friend.

"Carse," he said slowly, "I wonder just where that man concealed behind the secret panel would take the asteroid?"

"I've thought about that too," replied the Hawk. "We may be sure that he went for allies; Dr. Ku has several on Satellite III. Of them all, I think he would go for Lar Tantril."

"Tantril?"

"Yes, I think so. Lar Tantril, the Venusian. A fellow of much self-confidence and one of Ku Sui's chief agents, and who at present"—he smiled faintly—"nurses a special bitterness against me. I told you how I tricked him on his ranch. He'd be very eager to pursue us in the asteroid simply for the opportunity of repaying me for that trick." The adventurer's left hand rose to the bangs of flaxen hair combing down over his forehead, and he murmured, musingly: "I rather hope it *is* Lar Tantril. . . ."

"You hope so?" Leithgow repeated, surprised. "When he hates you so? And would be on the lookout for tricks? Why?"

"I would guess, Eliot, that Lar Tantril is not notable for intellect. Blustering, domineering — pretty much of a braggart, you know. Certainly he is not a model of caution; and he is not acquainted with Dr. Ku's asteroid, for he did not even know it existed. He will be able to run it, of course, with the advice of this hidden man, but surely he will not have the perception to discern the weakness in it. Yes, I hope it is he."

Leithgow went on to the main thing on his mind.

"I'm a little unsettled, Carse," he admitted. "I've been imagining this as the end of my outlaw years, and the beginning of my re-establishment on Earth. But this ship is slow, and I see now that if the asteroid does pursue us and capture us. . . . What do you really think of our chances?"

THE Hawk pursed his lips slightly, and for a little while he looked away and did not answer. When his voice came, it was tinged with bitterness.

"Eliot," he said, "I've been trying to find an excuse for my lapse, but there is none. It was the blun-

der of a novice, my not remembering to question Ku Sui about that secret panel. That was the cardinal point, yet it slipped my mind, in my preoccupation with the emergencies connected with the restoration of the brains.

"Our chances are only fair, Eliot; I'm telling you frankly how it appears to me. I believe we'll be pursued, and if we are the odds are greatly against us. The asteroid's far more powerful than we. And Jupiter only knows what new offensive resources Ku Sui may have given it: I had no time to study the several strange mechanisms I saw in its control room. Then, no nearby patrol ship would help us if we were attacked, for to them our enemy would be invisible, and they'd think us crazy."

He paused. But seeing the somber expression on the other's face, he smiled and cuffed him on the back.

"But maybe we won't even be pursued, Eliot! Maybe we'll be too far ahead for them to catch us! No doubt I've made it look too serious, so cheer up! We're alive, we've got everything we wanted, and we're hitting at full speed for Earth! And you know the luck of that space-adventurer they call the Hawk!"

Leithgow smiled gently in answer, then left the cabin for the sleep he needed so badly. Hawk Carse was left alone on watch in the fleeing *Sandra*.

A lonely, intent figure, he stood over the chart-table, working out their best course to Earth. Presently, however, he went back to the infra-red electelscope and swept it over the leagues behind. Carse could not detect any sign of the asteroid, but he remained for a little while at the eyepiece, staring at Satellite III. There it lay, a diminishing globe, three-quarters of it gleaming in the light flung by Jupiter. Dark patches mottled it: they would be the jungles. And there was the scintillant sheet that was the Great Briney Lake, with Port o' Porno nearby. On the other side of the little world, now, lay the hill containing Leithgow's laboratory. All going . . . going . . . falling swiftly behind. Satellite III, scene of so many clashes, plots and counter-plots, where so many times he and Eliot Leithgow had fought off the reaching hand of Ku Sui—soon it would be a million miles away. What adventures would he have before he saw it again? . . .

A little sound came from the Hawk, a half-sigh. Abruptly he called one of the men on his watch and stationed him at the 'scope, and then he returned to the chart-table and the work of calculating their course to Earth.

CHAPTER XIII

In Earth's Shadow

HOUR after hour and day after day, for a week the *Sandra* tracked on through the boundless leagues, the waxing sunlight beating steadily on her starboard bow and her silent gravity-plates and singing generators bringing Earth ever nearer. Friday, who possessed an extensive knowledge of all the practical sciences, did extra service in the role of cook, and his regularly served meals disguised the undifferentiated hours of space into Earth-mornings, noons and nights. Watch in and watch out, and nothing to disturb the even routine.

As for the ever-feared pursuit, there was no sign of it. Systematically and carefully the men stationed at the electelscope turned it through the region behind, but never did their watching eyes discern the bulk of the asteroid. Its disappearance, and the kindred mystery of who had been on it, remained unsolved.

Therefore peace came to Eliot Leithgow's face, and the tiredness left his eyes. The long, hunted years were beginning to be washed from him, and daily, to Carse, he appeared younger. Often in the control cabin or over a meal he talked of what lay ahead, and the happiness Earth held waiting for him. There was his daughter, Sandra, whom he had seen last as a girl of fourteen, and even then interested in his work. She would be matured now, and she would perhaps be eager to help him in the work he intended to resume. There was so much of it! Discoveries, theories, evolved during his fugitive years—now he could complete them and give them to his old circles of brother scientists. All this was in his conversations; but secret and unworded in his thoughts were anticipations of the old dear beauty of Earth, that beauty for which his ageing heart had pined so long. . . .

And Earth was drawing nearer.

ANOTHER week passed.

Twice a day the door of Dr. Ku Sui's cabin was unlocked and he was brought out under guard for several turns through the ship. Though for safety's sake they continued to dose him with the V-27, it was apparent that the gas had less and less effect on him. Four, then eight, then twelve times a day they regassed him—as often as they dared, considering its ultimate destructive mental effect—but more and more of the frankness and serenity foreign to his green eyes melted away. Gradually the normal veil came to hide their depths and make them enigmatic; and sometimes there was again on his face the hint of something strong and tigerish and cruel lying waiting. They no longer trusted him to attend to the five patients. He spoke seldom. A tall, reserved figure in black silk, attended either by Ban Wilson or Friday, he strolled through the ship for fifteen minutes and was returned to his lonely cabin. Of all the marks his experience must have left upon him, the only one apparent was his silence.

It was on the seventeenth day that he forsook that silence and directly accosted Carse. He had a request. The saffron face impassive, the long lashes lying low over the eyes, he said softly:

"I wonder, Captain Carse, if I might be permitted a glimpse of the subjects of my transplantation?"

Leithgow and Wilson were at the time with Carse in the control cabin, and they regarded their friend intently, curious as to what the reply would be. They saw his steel-gray eyes meet Dr. Ku's gaze squarely; and the two men looked at each other; Hawk Carse, complete victor at last, and Ku Sui, the vanquished.

The adventurer answered:

"Your request is only natural, Dr. Ku. Certainly you may see them, and perhaps offer an opinion on their progress, which has so far been in the hands of your assistants. But I shall have to accompany you."

"You are kind."

"Take the controls, Ban," Carse directed, and together they left the cabin.

THERE was no visible change in the five bodies. They lay stretched out in cots, sheets drawn up to their necks, and it seemed almost as if they were quietly slumbering and would presently wake up; though in reality consciousness would not return to the fine brains in their hideous, distorted bodies for many weeks, and then only if the healing processes were successful. Bandages swathed the heads,

leaving eyes and nostrils alone visible. An assistant of Leithgow's, at present on watch there, moved occasionally with instrument in hand to time the fevered pulses.

"I must ask you to stand back here, Dr. Ku," said the Hawk, indicating a spot some five feet from the nearest cot. His left arm hung easily by his side, the hand resting by the butt of his holstered ray-gun; and the position was not accidental.

Ku Sui nodded and doubtless noted the gun, but his eyes were on the bodies. He stood regarding his own handiwork in silence, his face inscrutable, and Carse did not disturb him. At last, in a low tone he asked the assistant:

"The food injections take successfully?"

The man nodded.

"I remember," the beautifully modulated voice went on. "I was not sure of one subject. Swanson's brain, was it not? Is his condition any better?"

"We are not sure."

"Ah, yes . . . yes. . . ." He appeared to muse, and no one disturbed him in the minutes of silence that followed. Finally he looked away and said:

"It was a great feat. Thank you, Captain Carse. I am pleased by this glimpse of the miracle my hands were made to perform. I am ready to return."

But at the door of his cabin he paused, and his eyes rested again on the cold, firm face close to him. He said:

"I suppose, Captain Carse, you intend to bring me before Earth's World Court of Justice?"

"Yes. Along with our living proof of your abduction of the five scientists."

The Eurasian smiled. "I see. And since there is no questioning that proof, it would appear that Earthlings will soon levy punishment on Dr. Ku Sui. . . . So. . . . You know, Captain Carse, I find your caution a great handicap. You keep gassing me; I am locked in; and since I have observed no excitement aboard the ship, apparently there are no friends anywhere near me. You have stripped me of everything." His eyes lowered for a moment. "Everything save this ring."

On the forefinger of his right hand, set simply in a platinum band, was a large dark stone.

"A black opal," said Dr. Ku. "I have worn it for years and I prize it highly. Perhaps at the last I will give it to you as a memento of these past years, Captain Carse." And he went into the cabin, where they gassed him again.

THE third week passed.

Crossing the orbit of Mars, now approximately in opposition to Jupiter, the *Sandra* streaked on into the last leg of her long voyage. The sun was a vast, flame-belching disk on her starboard side, and ahead lay Earth, growing each hour. Cheerfulness pervaded the ship, nerves were relaxing, faces lightening. Carse could not remember when Eliot Leithgow had worn a smile so constantly. It was only natural, for to the old scientist and his personal assistants Earth was home, the fulfillment of every desire, the reality and symbol of normal life and love of man.

But to Hawk Carse the Green Planet was not home. He was the adventurer, and wanderer, the seeker of new places with the alluring lustre of peril. Earth was to him little more than a port of call, and it brought him sadness to see how eagerly Leithgow stared at her growing face. Their parting was not far away now.

The *Sandra* logged off the miles. Then came the day when only ten thousand were left, and, soon after, five thousand. Deceleration had

long since been begun. Slightly but unvaryingly the ship's momentum slackened until she arrived at the two thousand mile mark, where the great curving stretch of the planet filled her bow windows, and the well-remembered continents and seas stood out as clearly as on a tilted classroom globe.

Carse leaned musing in a corner of the control cabin, oblivious to the well-meaning but toneless voice with which Ban Wilson, at the electelscope was butchering a song. A gentle tap on the shoulder summoned him out of his study.

He turned and saw that Leithgow had come to him. Carse smiled at the old scientist, and said:

"Well, Eliot, we'll be in soon now. Apparently we've made it safely, and there's nothing to stand between you and the day you've waited for so long."

"YES. But Carse—what of you? How long will you stay? I only wish I could persuade you—"

"To retire, Eliot? Settle down? Become a humdrum landlocked Earthling?" He chuckled, and shook his head. "No, no, old friend. Oh, I'll stay on Earth for a few weeks; I suppose I'll have to, to testify before the World Court of Justice when it takes up your case; but after that's settled, I'll be going back. You know me, Eliot: I'll never change. There are a number of things I must attend to at once. My ship, the *Star Devil*, is still on Iapetus, remember; I must find her and get her tuned up again. She's the fastest craft in space, bar none. Then I must make the round of my ranches and see that things are running smoothly. I've a lot of work on the Iapetus ranch, particularly. Then, there's that Pool of Radium—not that I need the wealth, if it really exists; but the job has killed so many who have sought for it that I'd like to take a crack at it myself. Oh, plenty to do!"

Leithgow looked at him, and there was all affection in his eyes, and friendship as close as it can be between men.

"No, Carse," said Leithgow softly. "I suppose Earth will never get her gravity on you for keeps. But I hope you will come down occasionally to see me, and perhaps once a year, say, spend a month with Sandra and me in our—"

"Carse!"

Ban shouted the name out. His face, turned from the electelscope, was alive with excitement.

"Here! Look!"

"What is it?"

"The asteroid! It's close!"

In two strides Carse was at the eyepiece of the infra-red glass attached to the instrument. One look through it served to verify Ban's report. The asteroid of Dr. Ku Sui had at last appeared.

IT was not more than fifty miles from the *Sandra*, a craggy fragment of rock, peanut-shaped, and tipped by its gleaming dome. Its speed seemed the same as theirs, but its course was different; and to Carse, that fact immediately explained its sudden appearance. He turned from the eyepiece with a face grown hard and cold.

"Well, it's happened," he said. "Instead of a stern chase, which would give us some chance of spotting them, they at once got off to the side and have all this time been flanking us. Now they're cutting in, straight behind, no doubt ready for business. All right. Ban, sound the alarm."

Like a gladiator about to step sword in hand into the arena, the *Sandra*, though a ship never designed for space duels, girded her loins and made herself ready for what at its best could only be an unequal struggle. She was out-

classed in weapons, weight and speed—in all save pilots. She had Hawk Carse at her helm.

The harsh alarm bell at once rang through the ship, an emergency call to stations. Carse, at the controls, rapped out another order.

"Defensive web on, Ban, and build up power for the ray batteries."

As the echoes of the bell died, a piercing whine grew amidships, and shreds of blue light swiftly scattered by the *Sandra's* ports. They were quickly gone, but they left behind an almost invisible envelope of blue which enwrapped the ship completely. The defensive web against attacking rays was on.

Friday tumbled into the control cabin, and on his heels two of Leithgow's assistants, the third being on duty with the patients. Carse briefly explained what had happened. "Friday," he ordered, "you take the stern ray batteries. Ban—"

But Ban Wilson had returned to the electelscope, and it had given him more news. Interrupting, he cried out:

"They must be attacking! A light just flashed in the dome!"

With his words they all saw the light. The visi-screen, though it did not reveal the asteroid, showed the first weapon with which it struck—a lustrous ray of purple which in a blink had leaped out to the *Sandra* and enfolded her. A shower of sparks crackled out from the ship's defensive web, but the purple ray continued.

"I don't know that ray, Eliot," Carse said. "What's on our speed indicator?"

The scientist's gasp was plainly audible as he read the dial. "Why, it—it's dropping! Much faster than our deceleration accounts for! That ray—why, it must have magnetic properties! Carse, the asteroid's stopping us!"

CHAPTER XIV

The Hawk Strikes

NO surprise showed on the Hawk's face, though the others were visibly shaken. He, at the helm, merely nodded and continued with further orders.

"Williams," he said to one of Leithgow's assistants, "get Thorpe and go and dose Ku Sui with V-27. Give him plenty. Then both of you station yourselves, ray guns in hand, outside his cabin. We'll take no chances with him, gassed or not. Friday, open our radio receiver to the general band. Just the receiver, not the mike. . . . Our speed, Eliot?"

"Down to seven hundred, and falling steadily."

Carse went to the electelscope, after giving the controls over to Ban.

Squarely behind the *Sandra*, and within twenty-five miles, the peanut-shaped body had come. It was an ominous and silent approach. The *Sandra* remained pinned by the purple ray for minutes while the Hawk studied her aggressor. As he watched the asteroid, the others watched him; Ban Wilson fidgety, Friday clenching and unclenching his big hands, Eliot Leithgow with whitened face and shoulders that seemed to have bowed a little.

The forward speed of the *Sandra* decreased to four hundred miles an hour, and still the Hawk studied the massive body behind. . . .

A sputter sounded in the radio receiver. Carse turned away from the electelscope and listened to the heavy Venusian voice that was suddenly speaking to him from it.

"Carse, I've got you! You've seen our ray, of course, but have you looked at your speed indicator? You're caught—and this time you're going to stay caught. You cannot possibly resist the magnetic ray

I have on you, and in a few minutes you will be drawn right into me. I advise you to surrender peacefully. No tricks — though there's no trick that could do you any good! Nothing! I have you this time!"

A frosty smile tightened the Hawk's lips.

"I was right, Eliot," he murmured. "The man behind the panel took the asteroid to Lar Tantril. He is our opponent."

THOSE were his words, but he did nothing. He seemed content to stand with cold, intent face looking back through the infra-red electelscope. The *Sandra's* speed sank to three hundred, two hundred and soon a hundred, and the asteroid, which was of course also decelerating, crept up remorselessly. Ban Wilson had every confidence in the Hawk, but finally the inaction grew too much for him to bear.

"Jumping Jupiter, Carse!" he sputtered. "—aren't you going to do anything? Use our rays! Try maneuvering to the side! Damn it, we're just letting them take us!"

The adventurer might not have heard, for all the sign he gave. The Earth-clock on the wall ticked on; seconds built minutes, and the minutes passed. The asteroid was only ten miles astern.

"Eliot," said Carse quietly, "get me one of your infra-red glasses."

He took over the controls again. Carefully he varied the forward repulsion and sent current to the side gravity-plates, and slowly the *Sandra* answered by rotating, longitudinally, reversing her position. Still maintaining a slight and dwindling speed toward Earth, her bow swung from that planet's eye-filling panorama and came to face. Instead, the invisible asteroid. When turned completely around, the men in her control cabin looked through the bow windows right into the brilliant cone of the purple ray.

Lar Tantril's voice again boomed from the broadcasting shell, and this time it was harsh with anger.

"Try no tricks, Carse! I see what you intend. You plan to suddenly *answer* my ray, instead of continuing to resist it, and so drive right past me and escape. But I warn you I have terrific power, and if you move towards me of your own volition, I can burn you to a cinder in three seconds, and I'll do it. You can't escape! If I have to destroy Ku Sui, all right—but I'll get you!"

THE Hawk strapped over his eyes the infra-red glasses Leithgow now gave him.

Reversing the *Sandra's* ends had neither increased nor decreased the rate at which the asteroid's purple stream was bringing her closer. Obviously the magnetic stream was being varied. The space-ship's forward momentum merely continued to drop normally until the moment came when she had no Earthward velocity at all; and then more quickly she moved toward the restraining asteroid.

With his infra-red glasses, through the bow windows, Carse could now see the massive body in full detail. There was the dome, a huge, gleaming cup of transparent stuff now showing wisps of blue, from the defensive web around it; and inside were the several buildings, and minute black dots which were the figures of men. There was a great number of them. The largest group was clustered inside one of the large ship-size port-locks in the dome. The lock's outer door was open, and it was from there that the purple ray seemed to originate. Obviously the intention of the enemy was to draw the *Sandra* right in. Five miles now seperated asteroid and ship.

Again the Venusian chief spoke.

"I warn you once more, Sparrow Hawk, try no tricks. You can see the men I have here, but you can't see my ray projectors. They're hidden, but they're centered on you, every one, and my hand's at the control that fires them. They have terrific power, Carse. Better not attempt anything!"

The Hawk switched on the extension microphone at his side. He said levelly into it:

"Lar Tantril, I'll make a bargain with you: a favor for a favor."

"What?" shot from the loudspeaker.

"I will agree to surrender peaceably when you've drawn my ship inside if, for your part, you promise to free Eliot Leithgow, who is aboard with me, and the five patients on whom Ku Sui operated. If you don't grant me that, I will oppose you to the last pull of my finger on trigger."

"But, Carse—" the Master Scientist began, horrified; but his expression of amazement faded when the slender man at the radio turned his head and half-closed one eye in a wink.

"You will agree to that—and no tricks?" Tantril's voice repeated.

"I will agree to it. And as for tricks, what could I possibly try? Your rays could burn through the maximum power of my web in three seconds, as you say: I know it as well as you. I only wish there was a chance to get out of your range in time."

"All right!" the Venusian replied decisively. "I agree. I'll release Leithgow and the five patients. Keep away from the controls and I'll draw you in."

CARSE switched off the microphone.

"A hell of a lot Tantril's word is worth!" muttered Ban Wilson. Once more, surprisingly, the Hawk winked. Friday was grinning now. For once in his life he had guessed his master's strategy before the others.

A mile and a half to the front lay the dome-end of the asteroid. Perhaps nine hundred miles to the rear lay the tremendous mottled curve of Earth, with her dangerous upper layers of the stratosphere all too close. In the very face of Earth, all three on a line, the ship lay linked by a stream of purple to the great rough-hewn, errant asteroid. Half the bulk of all three lay sharply outlined against the black of space by the intense yellow light of the flaming distant sun.

The asteroid neared to a mile, then a half-mile. Hawk Carse said curtly:

"Ban, when I give the word, put all the power we've got into our defensive web. Load the generators; overload them; tax them to the limit. That web must be as tough as possible for five seconds."

"Got you, Carse."

"You've — a trick?" ventured Leithgow timidly.

"I think I have, Eliot. Lar Tantril might have caught on when I turned the ship, but unfortunately for him his brain is incapable of proceeding past a certain point. . . . All right, Ban."

"Feel it!"

In answer to Ban's hands, the deck of the control cabin was literally vibrating under the mounting speed of the generators in the power-room. The generators could not stand that terrific overload long: they would burn out. But Carse needed only a few seconds of it.

The asteroid was a quarter of a mile away, seen through the infra-red. The dome loomed large.

"All right!" whispered Hawk Carse. "Hold on!"

With the words he unleashed the *Sandra's* full acceleration.

IT was a risk and a big one, but the Hawk had it calculated to a fraction of a second, and so, without hesitation, he took the chance. A little less than four seconds to reach his objective, he reckoned; a little more than one second for Tantril to release the asteroid's disintegrating rays as he had threatened; therefore about two and a half seconds for the *Sandra* to be exposed to those rays. The chance that her defensive web could resist them for that long would decide it.

From almost a standing start, the *Sandra* swept ahead, generators humming, her web a blue mist around her, acceleration at the full. Straight down through the heart of the narrowing purple ray she sped, a hurtling metallic projectile, hundreds of tons in mass, her stub bow levelled dead at the dome.

After a second the asteroid bared its fangs.

A cone of brilliant orange flamed and washed around the *Sandra's* bow, and a storm of soundless sparks engulfed her. She was caught in a maw of fire, and held there for the remaining terrific seconds of her wild forward dash. But the seconds passed; the hands of Hawk Carse were delicate on her controls; and the *Sandra*, curving slightly upward, struck, crashed, wrenched terribly in every joint; and then the jolt and the protesting wrench and the spluttering sparks were gone from her, and there was around her only the deep silence of lifeless space.

At three hundred miles an hour the *Sandra* had nicked the upper plates of the dome and streaked on, unharmed!

It was not necessary now to use infra-red glasses to see the asteroid. It was there in the visi-screen for naked eyes, but for seconds not one of the men in the ship's control cabin thought to look. The awful acceleration and shock had dazed them. They had not known what was coming, except Friday and the Hawk, and only the latter was able to retain reasonable alertness. He, almost immediately after the impact, cut down the load on the generators and brought the *Sandra* out of her mad drive forward, rotating the ship until she was facing back towards the asteroid. Then all of them looked through the bow windows, and what they saw told the story in an instant.

"It's visible! See—the invisibility's gone!" cried Friday.

A SCORE of miles away the body lay, fully revealed, its starboard half gleaming hard and sharp in the sunlight. Cautiously the *Sandra* drew closer. Carse gave the controls to Ban and examined it carefully through the electelscope, after removing the infra-red attachment.

He saw that the keel of the *Sandra* had torn a great, mangled rent in the dome and through this the air had rushed out. Space had taken possession. The disintegrating rays which had been burning at the *Sandra* had been snapped off with the sheathing of invisibility; in that one wild second of impact, all the asteroid's functioning mechanism had been destroyed. Lar Tantril had not thought quite far enough: he had not sealed the buildings air-tight against a possible crashing of the dome, and for that reason alone he and his men had gone down in full defeat under the drive of the Hawk.

Shreds of flotsam drifting and turning in space around the dome now became visible—bits of wreckage hurled out from the tear, and also a number of white, bloated things which once had been the bodies of men. The outrushing tide of air had taken them along, and now they drifted, shapeless, all of a kind, in the lifelessness of space.

"Merciful heaven!" whispered Eliot Leithgow, staring at the desolation. "Gone! Just snuffed out!"

The Hawk took over again and brought and held the *Sandra* in a position a quarter of a mile above the now rapidly falling asteroid.

"They're all dead, I'm sure," he said in a voice hard and emotionless as his graven face. "They must be, for the asteroid is now visible, and that means that the doors of the power building were open. Inside and out, all there is dead, machinery and men. . . . Still, it had to be done. It was they or we. A variation of the trick we used to escape from the dome before, Eliot; and Tantril of course didn't expect it and protect himself as Ku Sui did that other time. It's all done now—yes, its gravity-plates too, for see, it's turning."

"And fast!" murmured Friday.

The body was rotating around its longer axis at about twice the speed of an Earth-watch's second hand. Now the dome was sliding under, out of their sight, the craggy rock belly coming up to take its place. Nine hundred miles away was Earth—rather, less than that, for the body was now free to accept the tremendous gravity pull of the planet so near. Soon it would plunge to destruction there. . . .

A THOUGHT came to Carse, and he said:

"Perhaps Ku Sui would like to see what has become—"

On the last word he stopped and whirled around. His eyes were suddenly intense and his face startled.

"I heard a hiss!" said Friday.

"You too? Then it was a port-lock!" Carse turned to the visi-screen. "Look there!" he cried.

In the screen Earth made a titanic background against which, a falling, dwindling figure in a clear-cut in the sunlight, gleamed space-suit. Down it went, rapidly, even as they stared, until it hung just off the also-falling asteroid. It was obviously preparing to enter the dome.

"Take the helm, Ban, and watch him!" Carse ordered harshly, and ran aft from the control cabin.

Leithgow and Friday, following at once, found him inside the open door of Dr. Ku Sui's cabin, examining two figures stretched limp at his feet. The men were Thorpe and Williams, who had been set to gas and guard the Eurasian. Carse said:

"Both dead. Poison. Look at Thorpe's wrist."

On the right wrist of the dead man was a line of red, a scratch, and swollen, discolored flesh was ugly around it. One cheek of Williams bore a similar patch. Both had been armed with rayguns, but now they were gone. Half to himself, the Hawk murmured:

"Yes, poison. It might have been in the ring. Everyone else was in the control cabin. The men entered the door, Ku Sui was waiting—quick death. . . . Well, I'm going after him."

Not understanding, still horrified by the contorted face of the man on the deck, the other two gazed at the adventurer.

"But, Carse!" Leithgow broke out. "How can you? How can you possibly—"

"He's gone back to the dome," the Hawk cut in frostily. "He can't make it to Earth as he is now, for we'd see him and easily be able to pick him up. No; he's got some reason for returning to the dome. Something important. He thinks he's escaped. . . . He's mistaken."

A shudder passed over Friday, for Hawk Carse's eyes had fallen on him, and they were deadly.

"Let me by, Eliot," the man whispered. "This time he goes or I go, but by the gods of space it'll be one of us!"

CHAPTER XV

There Is a Meteor

HIS face set and cold, Carse ran to the stores cabin, just as the Eurasian must have hurried there a few minutes before. He took one of Dr. Ku's self-propulsive space-suits down from the rack and slipped into it, sticking a raygun in the belt. Still not speaking, he glided to the rear port-lock, Leithgow and Friday running alongside and attempting to dissuade him from the dangerous pursuit. Their words were wasted. Carse gave them only a faint smile and a few directions.

"Keep the ship as close as you can without danger. No, Eclipse; I'm going by myself; there's no need to risk two. If I don't come out, you've everything needed to prove your case, Elipt—the re-embodied brains, Ku Sui's four white assistants—"

"I tell you you're going to your death! You'll be caught inside! Earth's attracting the asteroid now, and in a few minutes it will be plunging through the atmosphere with terrific speed! The friction will make it a meteor, and you'll burn, Carse! You'll die in flames! You haven't but a few minutes to do the whole thing!"

"Have to risk that, Eliot." He swung open the inner door of the lock and stepped into the chamber. "Remember, keep as close to the asteroid as possible, and a steady watch for Ku Sui and me." He looked levelly at them, white man and black, for a moment, then turned his face away. "That's all. Good-by," he said.

The door swung shut in their faces with a hiss of compressed air.

The Hawk closed the face-plate of his helmet and rapidly spun over the controls. Another hiss, and the outer door moved wide. He stepped with force into space.

THE panorama below him was breath-taking; Earth seemed almost to hit him in the face. He had not realized it was so close. The sheer, mighty stretch of the globe filled his eyes, and for seconds he could not focus on anything else, so overwhelming to his vision was the colossal map. It reached away to left and right, before and behind, and he was so near that it seemed almost flat, a sun-gleaming plain on which stood out in sharp outline the continent of Europe, the Atlantic Ocean and, bordering it, the edge of North America.

To his left was the flaming orb of the sun; and directly underfoot, rotating against the vast background of the North Atlantic, he now saw the asteroid, glinting metallically along its craggy length as it swung over. Carse centered every bit of power he had on it, and at maximum acceleration began to overhaul his objective.

The asteroid was plunging free to Earth, and the rate of its uncontrolled plunge was second by second mounting tremendously; but Carse's power-fall quickly enabled him to overtake it. As the dome swooped up in front of him, and the sunlight washed briefly over its desolate buildings, he looked hard for a shape moving amongst them, without success. Doubtless the Eurasian was well inside by now.

The job of getting into the dome was a hazardous one. About every thirty seconds the asteroid described a complete rotation, making the rim turn at a speed of half a mile a second, and that made the task of entering extremely dangerous to a man whose only protection was the metal and fabric of a space-suit. Misjudgment would either rip the suit or dash him to instant death. He had to slip cleanly down through the jagged tear in the dome, planning his swoop accu-

rately to the fraction of a second

Never cooler: the Hawk made it. Building a parallel speed equal to that of the rotating dome, he followed it over in a dizzy whirl; and as the rent came below he shot curving down and in with sufficient precision, and at once swiftly adjusted his gravity to offset the asteroid's great centrifugal force.

FOR alternating fifteen-second periods the sunlight filled the dome and its buildings; and on the tail of the first of these, even as the sable tide swept all vision from him, the Hawk arrived at the door of one wing of the central building. He had not seen Ku Sui, and he had no time for exploration, but he did have a hunch as to where the Eurasian had gone, and he followed that hunch. A silent, giant-gray thing in the black silence of the corridor, grim, intent and seeming irresistible, he swept along it; and every second he knew that a raygun might spit from where it had been waiting in ambush to puncture his suit and kill him. For whether or not Ku Sui was aware that he was being tracked by his old, bitter foe, Carse did not know.

The asteroid plunged down faster and faster. Earth's atmosphere, with all its perils of friction, coming ever closer, and the great bosom of the planet lying waiting to receive and bury the rock hurtling towards it. Throughout most of the leagues of space that asteroid had tracked on its master's diverse errands, and in many distant places the trails of Hawk Carse and Ku Sui had crossed and left blood and crossed again; and now those three—asteroid, Eurasian and the Hawk—were drawn once more together for the spectacular and epic climax, now only minutes away. No power in the universe was to stop the plunge of the asteroid; it remained to be seen how one or both of the two living humans on it could get out in time. . . .

But of all this, nothing was in Hawk Carse's mind except the beating, driving realization that few minutes were left in which to play out the last scene. With reckless haste he sped to where his hunch led him, the secret panel in Dr. Ku's laboratory. As he reached it, faint sunlight came filtering in from somewhere and he saw that the panel was open.

He looked within and dimly saw a ladder reaching down into black depths. Without hesitation he thrust through the opening and dropped into the blackness. He dared not lose a second.

HE hit bottom with a thud, changed his glove controls and reached out in the darkness. He felt that he was in one end of a passageway. As rapidly as he could, his arms stretched wide, all his nerves and muscles and senses alert, he pressed along it.

Continually he was thrown into the rough wall at his right by the centrifugal force of the asteroid. How far did the passageway extend? Was Ku Sui at the end of it? It occurred to the Hawk that the asteroid was a developing shooting star, eating up the few hundred miles of life that remained, streaking down into the atmosphere, where waited quick friction and incandescence—and he down in the heart of it, blind, without clue to what lay in front of him, ignorant of everything, and with only minutes in which to achieve his end. There'd be no heat-warning through his insulated suit. Even now, perhaps, there was no time to get out; already the deadline might have been crossed; he could not know. He went on...

How far? A hundred yards; two hundred? Easily that, he thought.

and still no variation in the blackness around him! The passageway seemed straight, so he might now be past the rim of the dome above.

Then, for just a second, he saw a faint wisp of light ahead!

Automatically Carse's raygun came up, but in the time that simple motion took the light was gone and the blackness was as deep and lifeless as before. But he was coming to something. He went on, perhaps a little faster, hot to discovery the last emergency resource of Dr. Ku. He took no pains to avoid making noise, for he knew Ku Sui could not hear him through the airless space between.

After another hundred yards or so the light from ahead winked again. It was stronger. Only a second of it, but he now suspected that it came at regular intervals. It was a machine, perhaps, working under the hands of the Eurasian. On—on! With the seconds fleeting by, building to the small total which would bring friction to the asteroid, and incandescence, and scalding death for him within it!

Again, suddenly, the mysterious light. It left instantly as usual, but not before it revealed, well ahead, the end of the passage. Quickly he traversed the remaining distance and felt around with his hands. He found what he half expected. There was an opening, a doorway, to his right. The room beyond surely held the final secret of the asteroid. And if Dr. Ku Sui were anywhere, he was in there.

CARSE restrained an impulse to rush in, deciding to wait for the recurring light. Everything in him told him that this was the climax, that through the door to his right lay the object of his chase; and in spite of his consciousness of the plunging asteroid, and the up-leaping skin of Earth's atmosphere, now so close, he stood full in the doorway, gun ready, waiting. Seconds were precious, but this was the part of common sense. He needed the light to show him what perils he must face; he could not go into that chamber ignorant of the situation there.

For what seemed ages the fantastic figure stood there. The great rock turning over and over, with awful speed dropping down, Earth nearing, death ever closer—and he standing in silence and darkness, waiting to finish the feud! He might never escape; he knew that; it might already be too late to try; but the core of the man, his grim and steely will, would not let him think of retreating towards safety until he had faced Dr. Ku Sui and decided the account between them forever.

The wall of darkness melted. A ghostly light filtered through. He stared, and in its brief maximum saw before him a high, bare rectangular room, hewn out of the rock—and at its far side a man in a space-suit. Ku Sui, brought to bay!

But Carse, for one of the few times in his life, doubted his eyes. What trick were they playing him? For it was not a real, sharp figure that he saw; it was an indefinite one, shimmering and elusive, like a mirage. A prank of the strange light, perhaps. But Ku Sui nevertheless! Ku Sui trapped!

The Hawk leaped forward with outstretched arms to seize and hold the Eurasian's motionless figure. As he moved, the second of ghostly light dissolved away, and in the blackness his eager reaching arms closed on—nothing!

Surely Ku Sui had been there! Surely he had not just imagined he saw him!

BAFFLED and coldly raging, the Hawk whirled and groped frantically. The centrifugal force

caught him off balance and hurled him into a wall, but dizzy he continued his desperate search, sweeping his arms all around him, over walls and floor and, rising, the ceiling. The tumbling asteroid banged him unmercifully into the six sides of the room, but even as he was flung he reached and felt in every direction—felt without result.

In some incredible way, Ku Sui had eluded him. The second the light failed, he must have slipped by and escaped down the passageway behind. The Hawk could hardly understand how it might have been achieved, but there was no other explanation. So, with lips firm set in his cold, grim face, he felt to the doorway, ready to track back through the long, unlit passage. He might still overhaul and capture the other. If there was still time. . . .

But was there?

The passing seconds had not been idle. Inexorably they had brought him to Earth's atmosphere. He stared around the room in sheer horror.

For its blackness was relieved by the faintest of glows. It was not that of the recurring light; it came from the whole rock ceiling above. Carse was overwhelmed by the realization that within numbered seconds the surface of the asteroid would reach incandescence.

Thoughts raced like lightning through his head. He could not get free through the corridor and dome behind: that would take at least three minutes, and not a quarter of a minute was left. Ku Sui too, if he were in the corridor trying to reach the dome, was trapped and finished. A meteor flaming to Earth would be their common grave!

A searing, hideous death! Trapped within fiery walls of melting rock!

At that moment the regularly recurring flash of light came, and under pressure of his great need the phenomenon meshed with understanding in Carse's mind. That light was sunlight! It came at definite intervals as the dome side of the asteroid rotated to face the sun.

And that light could reach the room only by way of some channel in the ceiling!

IN the waxing glow of the rock above him, Carse swiftly found the channel—a vertical bore several feet wide, in one corner of the ceiling. Its rock sides glowed redly, and at their end was a round black patch that caused his heart to leap with hope. Outer space!—and a short, straight escape to it! In a flash he saw how Ku Sui perhaps had eluded him.

The Eurasian's prepared emergency exit would also be his!

He lost not a fraction of a second. Turning his glove controls to maximum acceleration, he rose with a rush into the bore. Despite his good aim the asteroid's centrifugal force threw him heavily into one red-hot side. His heart went cold; would the fabric of the suit burn through? No time for such worries—must make the frigid air outside—fast—fast—never mind bumps—quick out—and must stay conscious—must stay conscious to exert repulsion against Earth!

Like a projectile Hawk Carse shot out of that tunnel of hell at a tangent to the asteroid and in a direction away from Earth, and in an instant the doomed body was far below him, and streaking faster and ever faster to the annihilation now so near.

He fought to come out of his dizziness. Shaking his head, he glanced back for sight of a minute, suit-clad figure. Had Ku Sui preceded him through the emergency exit, his shape should be visible somewhere, etched by the sunlight.

There was no sign of him.

Carse's eyes dropped to the as-

teroid. He saw it already miles below, a breath-taking celestial object, a second sun, brilliant and increasingly brilliant as it diminished over the watery plain waiting to receive it. His mind saw the Eurasian, caught in the long corridor to the dome, already dead on this last flight of his extraordinary vehicle of space. . . .

The end came at once. The sun was quickly a great, brilliant shooting star, then a blinding smaller one; then its straight mad flight through the heavens was over, and it was received in the waters of the Atlantic Ocean and buried deep.

A cataclysmic burial. A titanic meteor, an incandescent, screaming streak in the night—a cloud of billowing steam—a wall of water rearing back from the strange grave of the asteroid, so far come from its accustomed orbit around Mars. . . . The thought came to Carse that Dr. Ku Sui had died as he lived, spectacularly, with a brilliance and a tidal wave and an earthquake to disturb the lives of men.

And a sadness fell over the heart of the Hawk. . . .

HE roused from it in a moment. He felt heat! In the rush of events he had not before noticed that his space-suit had started to burn from the friction of his own passage through the atmosphere. Fortunately, it was already cooling off.

For in spite of his own leaving speed and the added centrifugal velocity the asteroid had given him, he had hurtled down after the doomed rock; and only then was his building repulsion neutralizing Earth's gravity and his initial Earthward velocity. He had slowed down just in time to keep his space suit intact.

He came to rest, in relation to the Earth, and hovered there. Again he scrutinized the black untenanted wastes of space above. Far out, approaching as rapidly as it dared, was the *Sandra*.

He wanted to be sure, so he cut in his mike and asked Leithgow if they had, through their electelscope, seen Ku Sui leave the asteroid.

The anxious scientist told him they had not.

With a slight sigh Hawk Carse snapped off his contact and waited till the sharp, growing spot that was the *Sandra* should come dropping down to pick him up, and his friends learn from his own lips the story of the passing of Ku Sui. . . .

ASTOUNDING STORIES

For Science Fiction

STRANGE TALES

For Weird Fiction

"Pygmy Planet" Science

Dear Editor:

I am glad to attempt to answer the question about "The Pygmy Planet" proposed by Mr. Gervais and Mr Daniel in the June issue of Astounding Stories. In the story itself I had to ignore several technical details connected with the tiny world, to avoid clogging the action with explanation and running the story beyond space limits. For instance as one descends into smallness, stationary lights would change color, because their wave-lengths would be longer in proportion to the eye: red would vanish into the infra-red; violet would pass through the spectrum to red and vanish also.

The Science Fiction story seems to be a sort of game, in which the writer, once he has made his hypothesis, must meet every objection of the reader with a plausible scientific explanation. All the explanation, of course, ought to be in the story, but there is—unfortunately—a limit to what can be put in 9999 words. And some of the readers have become very expert at this game of discovering omitted details.

First, regarding the weight of the characters and other objects on the little planet, and regarding also the reason that the little planet did not fall to the floor, I submit that characters and planet were outside the influence of the earth's gravitation.

We know a great deal about what gravitation can do, but very little about what it is. Suppose that gravitation is a radiation (See Alvin J. Powers, "Bulletin of the American Interplanetary Society," April, 1932; and James MacKaye, "The Dynamic Universe," Scribners), which exerts pressure on all matters, and causes objects to "attract" one another, by shielding one another from part of this radiation.

The smaller atoms of the tiny planet ought to afford less resistance to this radiation. They might be almost transparent to the frequencies of it that affect ordinary matter, allowing the little world to float in the air, and freeing the characters from inconvenient weight.

On the other hand, the decreased atoms would be opaque to higher frequencies of the gravity-radiation, to which the earth is transparent. That accounts for the gravitation of the little world itself, which drew the characters toward it.

Regarding the operation of the gasoline engine in the small world, I sub-

mit that the expansion of the ignited gases in the cylinders would be relatively the same as before. It was assumed that the contracting atoms did not change chemically.

At first glance it might appear that the potential energy—and, as well, the inertia—of objects translated into the small world would be inconveniently large. But the energy—or mass—which would appear to be lost is manifested in the greatly accelerated time of the little world

Finally, in regard to the amount of evolution that had taken place on the pygmy planet, let me suggest that the evolutionary process there had been hastened artificially. It is thought by many biologists that mutations are caused by the influence of some radiation—perhaps of the cosmic ray—upon the germ plasm. The scientist in the story, seeking to observe the results of evolution, would naturally adjust the radiation of his "sun" to accelerate the process as much as possible—Jack Williamson

A. S. Versus Readers

Presenting the battle of the century' Between Astounding Stories and its readers:

Reader No. 1: "Do something about your rough edges, can't you?"

A. S.: "Aw, let up will you? Give a guy a long needed rest from that same old brickbat!"

Another Reader: "I don't like your illustrations."

A. S.: "Naw, and neither does anyone else. 'cept myself."

And still another Reader: "Does your artist drink? The May cover sure suggests that he does."

A. S.: "How dare you' Someone was yelling for a change. There's the change A new kind of picture."

Fourth Reader: "Tell your editor to slice the overlap from your pages."

A. S.: "Gr-r-r! I told one goof to shut up about that! Don't look at my outside so much. Look in the pages. That's what you buy me for."

Fifth Griper: "You need a larger Corner."

A. S.: "Now you're talking' There now. Let's arrange with that Bates fellow who thinks he's the editor of me Why, you readers really run me. And say, did the writer of this mess call you a griper? Why you've given me the only good suggestion."

Reader No. 6: "Hey, let's have a few reprints of the short stories."

A. S.: "Sometimes I could cry."

Reader No. 7: "When do we get smooth paper? We're being filled up with your pulp."

A. S.: "Must I do something rash? Listen, I'm all right the way I am now, and if you think I'll change just because of a few readers, you're crazy."

Eighth Crab: "For cryin' out loud! Such a price! Twenty cents! Imagine! Why don't you charge a quarter?"

A. S.: "I'll sell you a good used Chevrolet, 1926, for $7500."

The 9th: "And your outrageous size. What's wrong with you? Take some of Strongfort's lessons or something, but get larger!"

A. S.: I'm noted for my portability. A lot of people like my size, because they can easily carry me around."

The 10th: "C'mon, have colored pictures inside on each story."

A. S.: "Aw, rats! Well, any more arguments? . . . No? Aw, c'mon . . . "I see I 'licked 'em . . . Well, it was a good argument while it lasted . . . Ho hum! Sleep folks." [I say it's speech—Ed.]—Joe Kucera, 7102 So. 37th St., Omaha, Nebr

TTT

Dear Editor:

As contributing editor to "The Time Traveller"—Science Fiction's only fan magazine—I would like to announce its existence throughout the world.

In writing it has occurred to me that you might have the idea that we are a rival publication. Never fear! "The Time Traveller," TTT, has been created for the sole purpose of stimulating interest in stf., and thus it is beneficial to you. TTT is a monthly publication of, by and for stf. fans. It takes them into the future and forecasts coming stf events; it carries them backward to days of past fame in stf. and speaks of classics; it gives equally interesting material on the present. In it there are stf. puzzles with prizes; biographies and autobiographies of famous writers; the latest news on scientifilms; stf. Q. and A. departments; write ups of great interest; all sorts of novel articles and features, etc. Everything, in brief, to delight the stf. fan's heart.

As an example of our activities, copies of the February issue of TTT were mailed to the libraries of the principal cities of the U. S. A. This alone will add great interest in stf.

All interested may write to me or to the editor, Mr. Allen Glasser, 1610 University Ave., New York, N. Y. Thank you.—Forrest J. Ackerman, 333 Staples Ave., San Francisco, Calif

"Hot Pepsi" from Mr. M.

Dear Editor:

The illustration for the second installment of Wandl was a little bit cockeyed to my way of thinking. I've always been under the impression that space was practically airless. Wesso's drawings showed the disks coming toward the space-ship of Gregg, and dog-

gone if there weren't those marks around them indicating that they were traveling through some manner of atmosphere. You savvy? The disks had streams floating in back of them as though they were swishing through air. The event was supposed to have taken place some thirty thousand miles from the moon. Is it generally conceded that there is an atmosphere there?

Now that this error has been checked off you may come out of hiding, Mr. Bates. I promise to finish the letter in a burst of praise. Perhaps there'll be some denouncing to do, but it won't be a denunciation of you or the magazine; it'll be of some of the [Censored—Ed.] who read your magazine.

Hot pepa! Hawk Carse scores again! "The Affair of the Brains" was excellent (Mr. Shirer, of Flushing, L. I., please pay attention). I'll admit that most of the stories in Astounding tend toward the adventure side more than anything else, but Anthony Gilmore makes one forget this as he holds you enthralled, wondering just how the Hawk can escape from the evil genius, the yellow peril incarnate, Dr. Ku.

That is the point I wish to stress. Most stories of this type have the villyun do everything in his power to prevent the escape of the 'ero. Then, just as the ol' maniac is about to send our 'ero to perdition, he gets a notion that he is sleepy, and promptly goes to bed, leaving the 'ero untied, with the assurance that he cannot escape. Our 'ero then tries the bars of his cell and finds that they are rusty, and he breaks them with ease, clambers out, goes to the flying field and finds that an obliging crew on one of the battle-wagons of space has gone off on a spree (in that wicked, degenerate town of Port 'o Porno, I suppose). He goes aboard and with marvelous agility [ability?—*EA*] works all the mechanisms and doodads by himself. The ship is loaded with atomic bombs; naturally he goes and blows the villyun to the four corners of the Earth, or Mars, or wherever the locale of the yarn may be.

Anthony Gilmore gives a logical and reasoning account for every step taken by his character, Hawk Carse. That's my contention, and if Mr. Shirer cares to disprove it, I challenge him to.

Well, well, that's over, Mr. Bates. I hope you don't mind letting me dissociate Mr. Shirer that way. It gets my dander up when anyone criticises needlessly a perfectly good story.—Fred C. Miles, 1010 Springfield Ave., New Providence, N. J.

Sour Are the Juices of Perversity

Dear Editor:

I offer a version of Astounding Stories, which you no doubt will learn is a scandalization of Shakespeare:

Friends, Readers, and Editors, lend me your ears.
Of all the junk that I yet have read,
It seems the most strange to me
That men should buy and print
Such literature as is in this queer thing,
The like of which I have before not known.
Seeing that anytime and anywhere
Much more'll be got and better too;
I write to scorn and not to praise you.
Evil is oft interred in men's works
The good's invariably left behind.
So let it be with this.
Here, under invitations of the Editor,
For he is a bungling buncoe—
So are they all, all bungling buncoes—
Come I to scorn and insult you.
The noble Readers have said that this were good;
If this be so, it is a surprising thing
And surprisingly have I answered it.
This was once mine own, but cold and cruel to me.
The noble Readers say that it were good;
But they are all suckers, so they are.
It hath did much dirt to me.
Which hath mine temper roused.
Doth this in it seem good?
Yet, the noble Readers say that it were good;
But they are all suckers, so they are.
When that the Readers have cried this hath laughed
Did this in it seem good?
Goodness should be made of better stuff.
You all do know that ofttimes
It hath refused us even edges;
Yet, the noble Readers have said that it were good
But they are suckers, so they are
You carved it once, not without cause—
What cause withholds you, then,
To scorn and leave it now?
Oh, judgment, thou art fled to brutish beasts
And men have lost their reason. . . .
Bear with me—
My heart is in my throat
And I must pause till it comes back to me

[I say it's spinach—Ed.]—Harold N. Snyder, Moorhead, Minn.

Announcement

Dear Editor:

The International Scientific Association wishes to inform the readers of Astounding Stories of the completion of its reorganization.

Interesting additions to the work of

the club are now being discussed and in all probability 1933 will see a great expansion in the scope of its work. In order to determine whether this expansion is entirely feasible, I would like to ask that all who would like to aid in improving their favorite Science Fiction and also aid in the great work of making the world science-conscious write to Aubrey A. Clements, Sec. I. S. A., 660 W. Peachtree St., Atlanta, Ga., and inform him of their interest.

I would like to make clearer, here, the relationship between the International Scientific Association and Science Fiction. I have heard it expressed that there is no real attachment because the club deals with science and theory, while the aim of the magazine is to furnish amusement and pastime. A fact to be remembered is that the club has been formed for the express purpose of advancing science and we have discovered that one of the best ways to advance science is to advance Science Fiction.

Often, science is not easily brought to the interest of the younger students mainly because of its technical nature and the extreme dryness of the modern text-book. Science Fiction serves in the capacity of giving initial interest. It initiates the amateur scientist to the right road; it develops his interest and fosters a desire to know more. Then, he begins to study, and because of his intense interest, learns more science in one short year, with the help of Science Fiction, than he would learn in four years at a university. Soon the advanced person enjoys the monthly examination of his prowess, placed before him by the authors. He delights in his ability to discover errors and discrepancies. Here Science Fiction firmly and sharply implants its readers' previous knowledge beyond all possibility of forgetfulness. So, the best way to advance science is to advance Science Fiction.—Raymond A. Palmer, 2755 N. 13th St., Milwaukee, Wisc.

Future Preferred

Dear Editor:

A short time ago I said that I wouldn't squawk about any of the stories published in the magazine, but I object to having stories of the past. Future is what I want, and I believe that's what most of the guys buy the mag for.—Henry Lewis, Jr., La Roche, S. Dak.

So

Dear Editor:

Last night, while bedding down on Mars, the first stop on my intergalactic cruise in search of a magazine as good as A. S. that possesses a quarterly, I repented and decided to give you one more chance to publish it. Cr-r, if you think I'm bidding I have 50 quarterly-seekers with me to enforce my word!—Frank Green, 1316 N. Marshall St., Phila., Pa.

Poor Saranoff

Dear Editor:

And you still keep it up! I thought that you had surely reached your peak with the January, 1932, issue. But now you come along with this current, May, issue—and it is a wow!

However, I have one fault to find. Isn't it about time that Saranoff was given the works? I enjoyed the first few Dr. Bird stories because I was in doubt as to how they would end, but now—aw nerts!—Julius Schwartz, 407 East 183rd St., New York, N. Y.

The F. F. F.

Dear Editor:

Announcement Science Fictional: the Fantasy Fans Fraternity!

Science fantasy differs from the usual run of book and magazine fiction in many ways, but primarily in the unflagging loyalty and alert interest of its many followers. No other class of readers can compare in these respects with genuine Science Fiction fans. It is for them that the Fantasy Fans Fraternity is being launched.

There are no restrictions; no recommendations are needed. Girls, boys, men, women, may join freely. All lovers of the diverse forms of fantasy are invited. (This goes for you Strange Tales readers, too!) There are no dues or fees of any kind, except a very nominal charge (only a trifle more than a new copy of the magazine you are now reading) for a membership card. This card allows the Fraternizers special privileges and derives them much benefit.

All are urged to file immediate application with Allen Glasser, 1610 University Ave., New York City, New York.—Forrest J. Ackerman, 530 Staples Ave., San Francisco, Cal.

Both Onions and Science Fiction

Dear Editor:

I have been reading Astounding Stories ever since the September, 1931, number. Your authors sure know their onions. "Hawk Carse" is the best so far with the sequel, "The Affair of the Brains," a close second. Gilmore's stories are always realistically written.

Let's have more of Hawk Carse and the John Hanson tales.

Wesso is a good artist, but some guys can never be satisfied.—L. Morton, Lincoln Park, N. J.

Too Much Happiness

Dear Editor:

I find that too many stories end with

the hero and heroine marrying, and all living happily ever after (except, of course, the villain).—Kenneth Sterling, 240 W. 73rd St., New York, N. Y.

Yessir

Dear Editor:

I have been reading your magazine for five months, and words cannot express my appreciation of it. We have nothing even approaching it among our fiction magazines in England.

In my opinion the stories are just right, and I would not for one moment concede to those who wish the feminine element suppressed. A little romance just adds that which is required to make the story seem real.

I would very much like to correspond through the medium of your paper with American friends of both sexes, if anyone would be sufficiently interested in an English boy of a kindred taste in literature, to write to me.—John Stapleton, 17a Ripple Rd., Barking, Essex, Eng.

A Eulogy, of a Sort

Dear Editor:

Eulogy to Mr. Hamilton

Oh, Mr. Hamilton—
When the earth is plagued by insects,
When our globe is plunged into fire,
When this world is whirled by comets—
Send for Edmond Hamilton, Esquire.

When our world seems doomed by monster men,
Or when the reds menace our nation,
When plights and blights our fair world threaten—
Shout for Hamilton, by all in holy creation!

When the war god Mars descends from the stars,
When gnome-men burst from the bowels of the earth,
When this planet of ours is rocked by jars—
It will give Mr. Hamilton a chance to prove his worth.

When atomic energy is set free,
When gleaners great divine our fate,
When scientists mad loose the power they had—
Send for Hamilton, he will save us, by!

When diabolic rays disturb our ways,
When the sun goes out, as it will, no doubt,
When the world gets a shave, and no one to can save—
Yell for Edmond—you and you, for he most certainly will us rescue.

If Venus us battles, and the deathknell rattles,
If deluges this realm ever overwhelm,
If afflictions strange do us derange—
Leave it to Eddy to gain our liberty.

World-Saver, Inc., life-saver, and how!
Mr. Hamilton, take your bow!
Your talents deep you must safely keep,
Or our fair race will never sleep!
—Mortimer Weisinger, 237 Lexington Ave., Passaic, N. J.

Nope—Just Reckless

Dear Editor:

By the way, let me say I think you did a very sporting thing in placing your evaluation of the stories in that lock list of two of your readers in one of the recent "Corners." Once I severely criticised you for printing an unsporting criticism of Dr. Smith; but I guess you're a pretty good sport after all!—Richard Dodson, 537 S. Davis, Kirksville, Mo.

"An Absolute Genius"

Dear Editor:

I first started reading Astounding Stories in September, 1931, and all I could say after reading it was: Why have I been missing such a good treat for over two years?

I think the best story I have read is "The Affair of the Brain." There's nobody like Gilmore for writing a good story. "Wandl, the Invader" made a good second.

The covers are excellent. Wesso is an absolute genius.—O. D. Hellard, 18 Sycamore Rd., Bournville, Birmingham, Eng.

Who'll Explain?

Dear Editor:

Astounding Stories is in its third year now, and I still have the same complaint that I had after reading the first issue—not enough science, too many harebrained adventures. Now please don't take me for one of those guys who want about two or three pages of higher mathematics explaining why a character ate an egg; but I do want a foundation of science in every story. I am a high school boy who has a queer idea that he can be educated and still enjoy himself.

I have an idea or two concerning the color of space. This has been discussed in the "Corner," and it has, I believe, been said that the blackness of night proved the absence of light in space. Now we know that night is caused by

the rotation of the earth; that is, half the earth is in its own shadow. Therefore, I have come to the conclusion that space is black only in the shadow of some large body. Although this conclusion seems very obvious, I am doubtful about it because of the lack of air in space on which light may reflect. Will someone please point out my mistake?—Eugene Bray, Campbell, Mo.

Hm-m-m

Dear Harry:

This, a true incident, might get a laugh in your "Corner." Wisdom from childish lips. Our six year old daughter, Betty Starr, whom you will remember, was with a group of youngsters, each telling how her father was the best, at something, of everybody in the world.

Betty spoke up, proudly and loudly: "Well, my daddy writes the best suicide-science!"—Ray Cummings.

"Corner" First

Dear Editor:

Your May issue of A. S. was superb and outstanding. Every story was good, with the exception of "Pirates of the Gorm," of which the plot was old.

As usual, I turned to the "Corner" first and found a good assortment of letters. I agree with Arthur Hermann in his idea that an atom can be inhabited, but the time difference would be so great that it would be impossible to traverse in between and have the same people as before.

That was some letter by Henry Raymond. It seems to me that we could all afford to think for a few months and then write our letters, or not at all.—Thos. R. Daniel, Box 247, Sidney, Nebr.

More Science

Dear Editor:

Why do you persist in dishing out that rubbish about time travel? Why, that wouldn't make a decent fairy story, much less a bona fide scientific story. I know tastes differ, but it is my opinion that anybody who gets a kick out of such rot should have his head examined at once. A little more science, Mr. Editor, if you please. I deduce that all our readers are more or less of a scientific turn of mind, otherwise they wouldn't be interested in such A. S. And how about cutting down on those things none of us know anything about, such as fourth dimensions, invisible worlds of vibration, etc.?

But taking it all together, I think this is a great little magazine. The pictures and size are okay with me, and I see no sense of going to the expense of smoothing down the edges of the leaves. It's the contents I'm after.

If anyone near my own age (21) wishes to correspond with me, I will welcome the idea enthusiastically, especially those who are deeply interested in science and invention.—Ben Anderson, Gainesboro, Tenn.

Until Then!

Dear Editor:

I consider Harl Vincent's characters to be the most boorish, ill-tempered, bad-mannered, suspicious lot it has ever been my misfortune to encounter. He uses more grunts, snarls, hisses, gloats, and similar terms to the square inch than any ten of your other writers combined. His heroes are always losing their temper at the slightest provocation. If Vincent thinks that he is injecting realism in his tales by such methods, he is sadly mistaken. Usually, it's only the inexperienced writer who uses such a style.

With the exception of "Vulcan's Workshop," the stories in the latest Astounding were all excellent. I was agreeably surprised by Simak's tale. Some of his work in other Science Fiction magazines was not so good, but "Hellhounds of the Cosmos" was really original, and had a good ending. Which just goes to prove that Astounding accepts only the best.

Until Forrest J. Ackerman gives up Science Fiction.—Michael Fogaris, 157 Fourth St., Passaic, N. J.

This Thing So Strange

Dear Editor:

One thing I find strange in "The Martian Cabal"—the way Princess Sira fell in love with the hero after having seen him for such a short while. I really think he deserved to be reprimanded for kissing a strange female the moment he met her!

Ah, well—The ways of you Americans are strange to me!

I think love comes much too easily to these young people in your stories—too easily to be natural. Perhaps, though, men and women of the remote future will control their emotions to such an extent that they can fall in love at will!

Several of your authors have anticipated me in their imaginings, for instance, space ships which fly by the control of gravity, electromagnetic barrages round space ships (I have devised a disintegrator curtain round ships to destroy wayward meteors); but, I don't think anyone over your side has considered the control of the motion of electrons in the atom so as to produce flight in a desired direction, or drawing upon the unlimited stores of energy in space, or the ether, if you like to call it that. Space is a vast field of energy, which concentrates in places into island universes, suns and planets. If power could be taken directly from surrounding space, it would work our machines

and pass back to space again. How's that for perpetual motion? I suppose I can't send you a story myself, so you can take or leave the above suggestions as you will.

Many readers don't seem to understand the workings of time travel. It's really quite possible, if you have the machine. To have a real existence, a body must have four dimensions, length, breadth, thickness and duration. There is no difference between them, except that your immaterial consciousness moves along the dimension of time at exactly sixty minutes per hour, from the moment of birth to the moment of death. Events do not happen, we merely come across them in the course of our mental drift along the time dimension.

Readers who still don't understand should read the first chapter of "The Time Machine," by H. G. Wells, the popular English author. I say without reserve that I owe my special knowledge on the subject to him.

I agree with Mr. Raymond, however, that time-travel would not be a good thing for the whole world, but would bring chaos and confusion. If I invent one, no doubt I'll take a trip myself, but I'll keep the secret to myself.—D. H. M. Jack, Kingsbury Hill House, Marborough, Wilts., Eng.

Says It with Flowers

Dear Editor:

I just finished the June issue of Astounding Stories, and in my estimation it was the best I have ever read. If I were judging stories, all four would rate "A" with me, especially "The Raid on the Termites" and "Hellhounds of the Cosmos." The ending in the latter story practically doubled the rating. As I never read serials until I have all the installments, I have not tried to rate "Two Thousand Miles Within" as yet, but if this story is as good as the ones in the past it doesn't need rating; it'll be just a natural "A."

I was very glad to see that the "Corner" was back to its usual eight pages.

That, to me, is the most important feature of the magazine.

It's impossible to classify Astounding Stories, because it gets better each month.—Bill Hutchinson, 1714—5th Ave., N., Great Falls, Mont.

Amateur Issue?

Dear Editor:

I have just finished reading the June issue of Astounding Stories. As usual, the stories were first rate and I enjoyed them very much.

A little suggestion. In letters to the "Corner" I have seen that many of the readers think they can write stories. Some have even threatened to write in order to get the type of stories that they want. Well, why not? Why not hold an amateur story writing contest for the readers? I think that if you gave prizes for the best stories written by the readers, interest in the book and in the "Corner" would increase. You may even be able to use some of the best stories in the magazine itself. How about it? In this way you may be able to discover some new writing talent. Please print this in the "Corner" and see what some of the other readers think about the idea. Maybe some of those who disagree with your authors on some points can show us something better than ordinary.—Thomas Pritchard, 6 State St., Mt. Morris, N. Y.

Reader Spanks

Dead Editor:

Your issues of A. S. are mostly good, but "Manape the Mighty" and "The Mind Master" is stuff that is mental drivel.

Even a layman would know that the blood composition and physical organism of an ape would not suit a modern white man's brain, and the brain cavity is not only wrongly shaped but much too small. And even a mad scientist would know that an ape's body is not desirable.

Physically inferior to a healthy adult male in legs and spine and manipulative power for human movements; brutishly superior in arm force—but why waste words on drivel? The author has power and should employ his undoubted talents to better advantage.

"Giants on the Earth"—interesting. Was the author thinking of the biblical "Sons of God when they walked the earth and saw the daughters of man fair?"

Keep up your science. Try to avoid the hackneyed, and don't always and invariably make the hero rush out on his own to save his race unaided. Let him sometimes go for ample assistance—it is more probable!—Vic Filmer, 5 Wheatlands Rd., Tooting Bec., S. W. 17, Eng.

Announcement

Dear Editor:

This letter is to announce the formation of the Edison Science Correspondence Club. This club is for boys or girls from the age of 12 up. There are no dues, and there are no laws about where the members should live.

A monthly paper is published in which there will probably be a Science Fiction story by one of the members. The paper for this month has already gone out, but copies will be kept, and any new members entering will have the privilege of reading it.

Anyone wishing to join will please

write to me, and I will send them an application blank.—E. C. Love, Jr., 106 N. Jackson St., Quincy, Fla.

"Begorrah!"

Dear Editor:

Two years ago a great stroke of luck came my way. I was passing a newsstand one day when Astounding Stories, on top of a pile of other magazines, caught my eye. As it looked rather out of the ordinary, I thought I'd give it a try, and ever since that day I've been haunting the newsstand of Dublin looking for more.

What I like most about A. S. is the ideal mixture of fiction and science. Without one, the other would fall flat, for it's very much easier to be interested in, and to remember scientific details when they are in the form of a story and not a treatise.

There is, however, one thing that I consider impossible—time-traveling. It's all up the spout. Begorrah! I could travel back a few years and kill my own dad before he married, if it were possible. And then where would I be? [But why kill poor dad?—Ed.] Or on the other hand, I could wait until he got married to my mother, and be born again, and thus hear my other baby self saying "goo-goo." Sounds queer, doesn't it? As for future traveling, what's to prevent me traveling 500 years into the future, finding the skeleton of my long-dead son and bringing it back to 1932? Then when I do marry and have a son (I'm single at the moment), I shall be able to say to him, "Patrick, behold your own skeleton about 400 years after you died!"

It might be possible to jump into the future, but it would be impossible to get back again, because, during the travel into future, things would have been happening on earth just the same; and when anything's done, well, it's done, and can't be undone. My own humble opinion is that there might be one possible way of future traveling. Imagine a machine or a drug, which would act as an anti-stimulant on the human body and nervous system. Thus the heart, lungs, brain, senses, muscles—everything, including the mind—might be made to function several thousand times slower. Thus two thousand years would pass and seem only like one year to a human so treated. Obviously he could not get back again, but the idea sounds plausible, does it not?

Well, best wishes from Ireland.—Terence E. T. Bradshaw, Littleton, Ashfield Rd., Ranelagh, Dublin, Irish Free State, Ireland.

Other Good Letters Received from:

James McCrae, 4801 Longshore St., Phila., Pa.

Charles Johnson, Annandale, Minn.

George Nolfi, 2110 W. Roosevelt Rd., Chicago, Ill.

Reginald Smith, Lower Stafford St., Wolverhampton, Eng., who invites correspondence.

Mary A. Conklin, 125 E. Washington St., Coldwater, Mich.

Gerald Slade, Field View, North Road, Plymouth, Devon, Eng.

Gene DeBlasi, Manhattan Lone Scout, 1009 Washington Ave., Bronx, N. Y.

Aubrey Dector, 32 Martin St., S. C. Rd., Dublin, Ireland.

Jack Lyons, Jr., 27 N. White Hart Lane, Gottenham N. 17, London, Eng., who invites correspondence.

J. Garrigan, 12 Jamieson Ter., South Hetton, Durham, Eng.

Woodrow Wolford, 1876 E. 70th St., Cleveland, Ohio.

Roy Rockstrom, 1214 Prospect Ave., Norfolk, Nebr.

Bill Bailey, 1404 Wightman St., Pittsburgh, Pa.

Allen Plant, 17, 52 Cooper St., Pawtucket, R. I., who invites correspondence.

Jack Walters, 6363 Germantown Ave., Phila., Pa.

Louis Hogenmiller, 502 N. Washington, Farmington, Mo.

James Mong, 16, P. O. Box 137, Sunbright, Tenn., who invites correspondence.

Kenneth C. Werner, 815 N. Main St., Torrington, Conn., who invites correspondence.

G. Gilbert, 58 Lion Rd., Twickenham, London, Eng.

John B. Gross, R. F. D. 1, Frankfort, Ky.

Con Connolly, 16, Drolgneac, Cloutark Park, Upper Drumcondra, Dublin, Ireland, who invites correspondence.

Eugene B. Botelio, 126 E. Lancaster Ave., Wayne, Pa., who invites correspondence.

"The Readers' Corner"

All readers are extended a sincere and cordial invitation to join in our regular discussion of stories, authors, scientific principles and possibilities—everything that's of common interest in connection with our Astounding Stories.

Although from time to time I may make a comment or so, this is a department primarily for *readers*, and I invite you to make full use of it. Likes, dislikes, criticisms, explanations, roses, brickbats, suggestions — everything's welcome here; so come over in The Readers' Corner and discuss it with all of us!

—*The Editor.*

Switch to Camels

Never parched or toasted

A BLEND of choice Turkish and mild, sun-ripened Domestic tobaccos—Camels are never parched or toasted. Made fresh and kept fresh in the Camel Humidor Pack, Camels are mild and cool-burning. If you haven't smoked a fresh cigarette lately, switch to Camels for just one day, then leave them—if you can.

R. J. REYNOLDS TOBACCO COMPANY
Winston-Salem, N. C.

© 1932, R. J. Reynolds Tobacco Company

CAMELS

***Made* FRESH—*Kept* FRESH**

Don't remove the Camel Humidor Pack—it is protection against perfume and powder odors, dust and germs. Buy Camels by the carton for home or office. The Humidor Pack keeps Camels fresh.